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## ABSTRACT

This publication presents results of the third phase of a Pensacola Junior College project to develop certain vocational programs as competency-based education. A brief narrative discusses the entire project--especially phase 3, which involved identification and definition of those competencies expected by an employer using input from an advisory committee comprised of employers within the district. For each vocational program, some or all of these (or comparable) materials are provided: discussion of program general objectives; program map leading to earned certificate (associate of science degree); program major learning outcomes at certificate level; program goals at certificate level; major learning outcomes of courses; entry level competencies chart showing competency, rationale, program competency, and evaluation; and employer task evaluation instrument. These 16 vocational programs are included: automobile body refinishing, automobile body repair, building maintenance, business, civil engineering technology, computer science, corrections, criminal justice, law enforcement tract, drafting technology, environmental engineering technology, legal assistant, management, marketing, paramedic technology, and respiratory therapy technician. These related educational programs are also presented: communication skills, customer relations/industrial relations, mathematics, and occupational safety. (YLB)

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COMPETENCY-BASED OCCUPATIONAL PROGRAMS:  
IDENTIFICATION, STRUCTURING, AND EVALUATION



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133

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# PROJECT MEMBERSHIP

| <u>Programs</u>              | <u>Program Managers</u> | <u>Consultants</u> |
|------------------------------|-------------------------|--------------------|
| Computer Science             | Wayne Horn              | Charles Colgan     |
| Autobody Refinishing         | Lonnie Skipper          | Arthur Hyland      |
| Autobody Repairing           | Felix Boyd              | Arthur Hyland      |
| Law Enforcement              | Richard Coffey          | Judith Resch       |
| Legal Assistant              | Nowlin Keener           | Muriel Warren      |
| Respiratory Therapy          | Marcia Williams         | Joan Ziel          |
| Business                     | Dennis Stevenson        | Patricia Trachy    |
| Management                   | Gary Gage               | Jean Ross          |
| Marketing                    | Scott Key               | Richard Bedics     |
| Dietetic Assistant           | Jeanne Boone            | Ann Southerland    |
| Dietetic Technician          | Jeanne Boone            | Ann Southerland    |
| Corrections                  | Al Winfield             | Diane Sutton       |
| Emergency Medical Technician | Vicki Garlock           | Margaret Sielski   |
| Building Maintenance         | Andrew Housand          | Patrick Losee      |
| Civil Engineering Technology | Richard Wallace         | John Burns         |
| Environmental Engineering    | James Ward              | Glen Bevis         |
| Drafting                     | Fitzhugh Miller         | Paul Inacio        |
| Communications               |                         | Margaret Heath     |
| Communications               |                         | Sr. Mary. Leonard  |
| Mathematics                  |                         | Mickey Settle      |
| Trainer                      | Richard Bedics          |                    |
| Trainer                      | Virginia Lees           |                    |

## PROJECT OBJECTIVES

The Identification and Evaluation of Job Entry Competencies was the final portion of a long-term project designed to develop certain vocational programs as competency-based education (CBE). The consensus was that CBE would bring to the instructional program a higher degree of efficiency and effectiveness than had been experienced previously at Pensacola Junior College.

The total project consisted of three major phases. Phase One consisted to the development within the faculty of a fluency in the identification and evaluation of behavioral objectives. Syllabi for all courses were reconstructed in behavioral terms.

The second phase dealt with the identification of the prerequisite competencies students would need if they were to succeed in the program. Basic communication and computation skills were identified, and evaluation criteria were defined. Additional skills in the cognitive, psychomotor, and affective domain were also identified. The product of this second phase was reported in A Report for the Entry-Level Project for Selected Vocational Programs, 1978-79.

The third phase focused on the competencies the employer expects of a job-entry person. The competencies were not limited to the occupational skills, per se, but included related education--communication skills, computational skills, safety, and human relations as either customer relations or industrial relations. Evaluation criterion and follow-up activities were developed for each.

Structurally, the total project was based on seven specific tasks:

Task 1            To develop behaviorally stated objectives for all courses.

Objective (a)    To obtain behaviorally stated course objectives.

(b)    To have the faculty learn how to develop behavioral objectives.

Task 2            To develop evaluation instruments to measure the attainment of the behavioral objectives.

Objective (a)    To obtain evaluation instruments.

(b)    To have the faculty learn how to develop evaluation methodologies compatible with the objectives.

Task 3            To change from "intuitively deducted" objectives to objectives based on needed competencies.

Objective.        To learn how to define needed competencies.

Task 4            To establish prerequisite competencies for entry into programs using skills acquired in tasks 1 and 3.

Objective.        To define the minimum competency level required for a reasonable expectation of success in the program.

Task 5            To identify and define competencies expected by an employer using skills acquired in tasks 1 and 3.

Objective (a)    To learn how to identify needed competencies.

(b)    To define the competencies.



Task 6            To develop evaluation techniques to measure the obtained competency level using skills acquired in Task 2.

Objective.        To develop specific evaluation techniques and materials with an emphasis upon an ease of utilization.

Task 7            To develop a system of follow-up as the final portion of the evaluation scheme.

Objective (a)    To put into operation an evaluation of the graduate's performance at the job site.

(b)              To develop an evaluation which will function within the constraints of practical manageability and economic impact.

The seven tasks utilized a spiral approach with each task being revisited as the teachers' competence in CBE developed. An important part of the process was a constant review and evaluation of CBE programs under development nationwide, and the participation in the Council for the Advancement of Experiential Learning (CAEL) workshops. Materials, located and made available by the Florida Education Information System (FEIS) and Florida Resources in Education Exchange (FREE) of the State Department of Education, were invaluable.

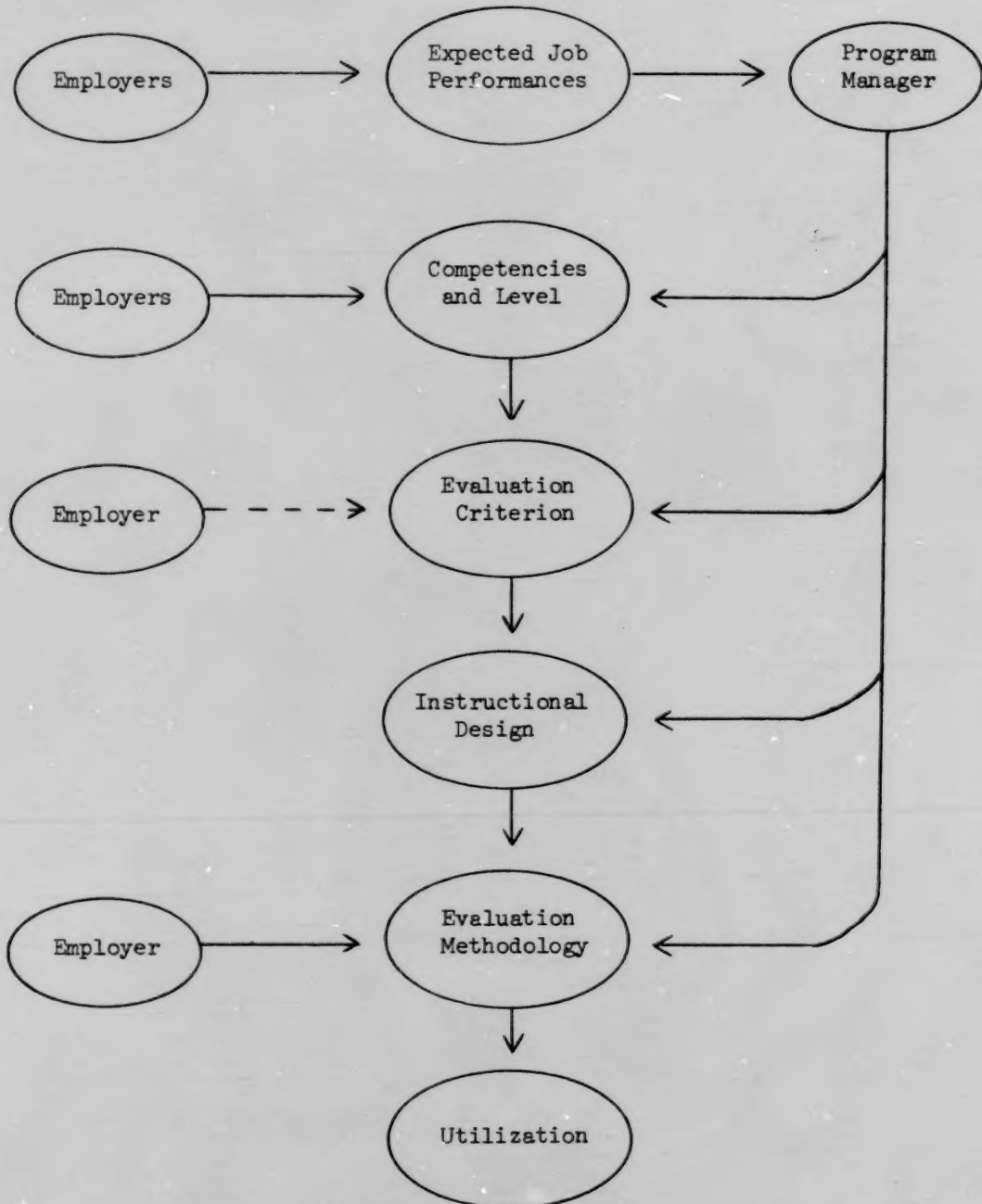
An absolutely essential component of the identification and definition of competencies was the input from potential employers. Every occupational program at Pensacola Junior College had an advisory committee comprised of employers within the district. The advisory committee communicated with the department head and program manager to identify the performances expected of the entrant into the job.

As the program objectives solidified, the advisory committee reviewed the development of the evaluation design and materials. The control of the program and the final decisions regarding content and structure remained with the department head. The Project Design Flow Chart pictures the developmental sequence of Phase Three of the total project.

The results of the project have proven to be highly beneficial at Pensacola Junior College. We do not propose that these program competencies are directly applicable, in total, to other schools' programs, because each school's program should be based upon its local employers' needs and expectations. But, we do endorse the methods by which the competencies were identified and evaluated. Furthermore, we hope that the materials contained in this document will serve as a guide for those who are interested in converting their own programs to competency-based education.

Noojin Walker  
Vice President for Academic Affairs  
Pensacola Junior College  
November 1, 1980

PROJECT DESIGN  
FLOW CHART



COMPETENCY-BASED EDUCATION:  
AN OVERVIEW

"Competency-based education is education that focuses on the outcomes of the formal educational process so that those outcomes are defined, agreed upon, and publicly stated in terms of assessable student behaviors. Appropriate assessment instruments and processes are developed and learning experiences designed to assist students in gaining the required competencies are offered.

"This understanding of competency-based education does not include the specification of any particular teaching mode or strategy, and/or special curriculum. It does require that a consensus be reached on the expectations for students which are to result from educational experiences and that the expectations be stated in terms of assessable behaviors."<sup>1</sup>

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<sup>1</sup> O'Connell, W. R., Improving Undergraduate Education in the South, SREB: Atlanta, 1979.

Competence is defined as

- ..Behavior integrated with knowledge

Competence is stated in terms of

- ..A general ability necessary to the effective functioning of a professional

Competence is demonstrated by

- ..Observable behaviors/performances
- ..Past experiences which sufficiently indicate ability in a given area
- .."Products" developed
- ..Documentation by former/present colleagues, teachers, employers, associates, etc.

Competence is measured by

- ..Designing a performance situation where behaviors can be viewed
- ..Establishing criteria which differentiate a competent performance from a less-than-competent performance

## DEFINITIONS

In developing a method for characterizing the various roles, tasks, and responsibilities associated with community college personnel, we need to establish a common vocabulary. Although the terms and definitions listed below may well be identified using other equally acceptable words, let's agree upon the following:

**POSITION/JOB:** The overall category into which one's duties are classified. Counselor, teacher, provost, and lifeguard are examples of positions.

**FUNCTIONS:** The roles a person in a certain position is expected to take on; the specific components of a position which an individual institution or employer identifies as essential elements of that position. For example, in one institution to fill the position of faculty member one may need to function both as a classroom teacher and as an academic advisor. A lifeguard in a particular county may need to perform the functions of lifesaving, teaching swimming, and cleaning the beach.

**COMPETENCIES:** The characteristics or abilities one needs to perform the function(s) effectively. To be competent, one must integrate knowledge with behavior. For example, to be a competent classroom teacher, one must not only know learning theory, one must also be able to apply this theory to specific situations. To be a competent lawyer, one must not only know the law, one must also be able to interpret and communicate it in specific situations.

**COMPETENCY STATEMENTS:** Statements identifying the general abilities one needs to function effectively as a professional. These statements identify both what one must know and what one must demonstrate. For example, to function effectively as a lifeguard, one may need to be competent at working/communicating with people in many age groups. The general competency is interpersonal communication. The competency statement, when applied to the behavior and knowledge requirements of a lifeguard is: "He/She must demonstrate that he can communicate (behavior) rules and regulations (knowledge) of the beach to people in a friendly yet effective manner (more behavior)." Just as some functions are identified as the roles of a position in some institutions but not in others, some competencies associated with a given function may not always and everywhere be necessary to carrying out that function effectively.

**CRITERIA:** Those specific tasks, abilities, attitudes, and knowledge bases by which one identifies the "job well done." Criteria get



closer to the evidence upon which judgments and evaluations are made than do competency statements, functions, or positions. If a judgment of competency is based on several criteria, it is simply easier to verify and reach consensus about competency. Some of the criteria for demonstrating competency in problem solving might be:

1. Identifies the cause of the problem
2. Finds alternate solutions
3. Evaluates plan for implementation

What becomes apparent is that this process of becoming increasingly more specific could go on ad infinitum. For the lifeguard, one criterion to demonstrate competence in swimming may be "swims against currents in adverse conditions." One could then ask for criteria for swimming against currents. However, while this may be important to cite for the novice swimmer, it is not necessary for the professional. The attempt is not to get so detailed as to lose sight of the overall position and function within which competent behavior is expected, but rather to move somewhere in between abstract generalities like, "She'd make a great secretary" and over-simplified specifics like, "She sharpens her pencils in five seconds flat."

PROGRAM: AUTOMOBILE BODY REFINISHING  
PROGRAM MANAGER: LONNIE SKIPPER  
DEPARTMENT OF TRANSPORTATION MECHANICS  
PENSACOLA JUNIOR COLLEGE

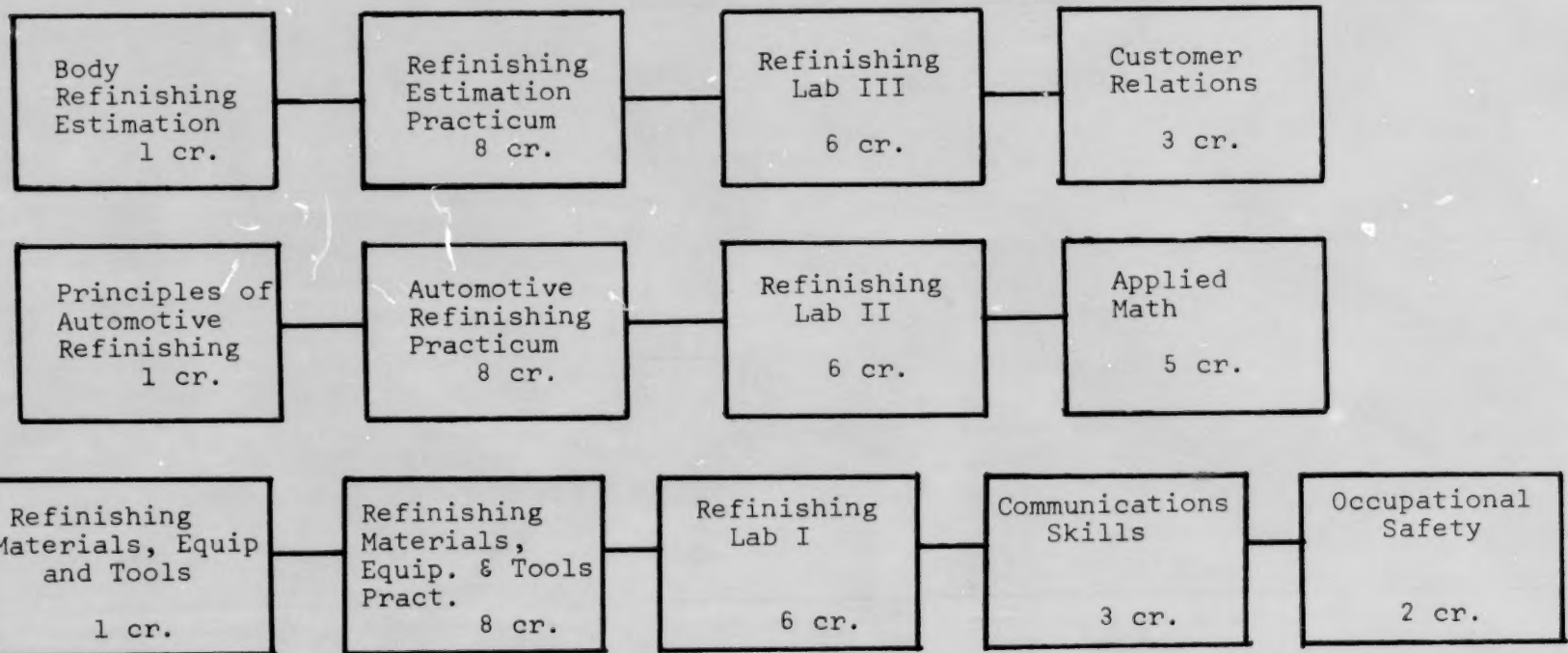
The Automobile Body Refinishing program is designed as a one-year Certificate curriculum and as a two-year Associate of Science curriculum. Each program contains the same instruction leading to proficiency in the job entry competencies. The AS curriculum builds upon the basic instruction and adds collegiate general education and one additional course in specialization.

The demonstration of competency is the principle focus of the instruction. The student sands, primes, tapes, and paints various automobile vehicles; plans work procedures; determines materials needed, as well as the cost of repair with the aid of charts, technical manuals, service bulletins, and collision estimating guides. Examines and determines whether to spot repair or repaint all over as needed to achieve desired appearance. Is knowledgeable of the operational theory of the various paints, thinners, and reducers. Proves his workmanship by actually performing the necessary work to the satisfaction of the instructor. Communicates with peers, supervisors, and customers regarding his work.

## PROGRAM MAP LEADING TO EARNED CERTIFICATE

The student desiring to earn the Associate of Science degree may pursue this goal by successful completion of the courses listed in the catalog.

Courses in each horizontal grouping below are corequisites.



PROGRAM MAJOR LEARNING OUTCOMES AT CERTIFICATE LEVEL

- I. Placed in a real shop situation, the student will be able to diagnose and repair damages to the finish of the modern automobile with 100% accuracy.
- II. Placed in a real shop situation, the student will be able to communicate orally and in written form the tasks and duties he/she has performed in the accomplishment of Outcome I above to his/her peers and superiors.
- III. Placed in a real shop situation, the student will be able to demonstrate satisfactory interpersonal relationships with his/her peers and superiors.
- IV. Placed in a real shop situation, the student will be able to realistically evaluate his/her contribution to the operation of the shop.

\*\*\*\*\*

PROGRAM GOALS AT CERTIFICATE LEVEL

- I. The student is prepared to obtain work in a training related field.
- II. The student is equipped to maintain employment in a training related field.
- III. The student is gratified by the performance of training related work.
- IV. The student is prepared to pursue an associate of science degree successfully should he/she so desire.

## MAJOR LEARNING OUTCOMES OF COURSES

Course Title    Refinishing Materials, Tools and Equipment Practicum

Course Number   ABG 0201

- I.    Given a properly working spray gun, the student will disassemble, identify each component and reassemble the gun returning it to proper working order.
- II.   Given an automobile and masking materials and machines, the student will properly mask automobile, protecting glass, moldings and other areas not to be refinished from the spray with 100% accuracy.
- III.   Given an automobile in various stages of refinish, the student will select and use the proper sandpaper in the proper manner to achieve correct blocking and edging effects.
- IV.   Given an automobile needing waxing and cleaning, the student will demonstrate the proper use of cleaners and waxes.

Course Title    Refinishing Lab I

Course Number   ABG 0203

- I.    Placed in a simulated shop situation, given an automobile in need of finish repair, the necessary tools and equipment, the student will mask the car with 100% accuracy.
- II.   Placed in a simulated shop situation, given priming and color materials of various types, the student will reduce them in the proper ratios under supervision of the instructor with 100% accuracy.
- III.   Placed in a simulated shop situation, given a masked car in need of refinishing, necessary materials, tools and equipment, the student will apply primer and finish under supervision of the instructor with a 90% accuracy.
- IV.   Placed in a simulated shop situation, given necessary tools and equipment, a car in need of cleaning and waxing, the student will apply cleaner and wax with 100% accuracy under supervision of the instructor.

## TERM II

### MAJOR LEARNING OUTCOMES OF COURSES

Course Title    Principles of Automotive Refinishing

Course Number   ABG 0204

- I. Given color charts and manufacturer's manuals, the student will identify the different types of colors with 100% accuracy.
- II. Given necessary manuals and representations of vehicle identification plates, the student will crossmatch to find proper paint number with 100% accuracy.

Course Title    Automotive Refinishing Practicum

Course Number   ABG 0205

- I. Given a vehicle needing spot repair and various containers of finish material, the student will mix two or more colors to achieve a proper tint to match an old finish with 75% accuracy.
- II. Given a vehicle needing spot repair, the necessary tools and materials, the student will mask the proper area and apply finishing material with 100% accuracy.
- III. Given a car with color applied to a spot repair, necessary tools and equipment, the student will compound, wax and buff the repaired area to blend the spot repair into the old finish with 100% accuracy.

Course Title    Refinishing Lab II

Course Number   ABG 0206

- I. Given vehicles needing spot finish repair, proper manuals, tools and equipment, the student will perform the tasks of spot repair under supervision of the instructor with 90% accuracy.
- II. Given vehicles needing overall refinishing, proper manuals, tools and equipment, the student will perform the tasks of overall painting with 90% accuracy.



Course Title    Body Refinishing Estimation

Course Number   ABG 0207

- I.    Given collision estimating manuals, a specific model of car in need of body and refinishing repairs of a specified nature, the student will identify the needed parts and materials from the manual with 100% accuracy.
- II.   Given collision estimating manuals, a specific model of car in need of body and finishing repairs of a specified nature, the student will compute the cost of parts, labor, and materials with 100% accuracy.
- III.   From the above two (2) learning Outcomes, the student will compute the cost of labor sales, parts sales, material sales, and determine gross profit for the job with 100% accuracy.

Course Title    Refinishing Estimation Practicum

Course Number   ABG 0208

- I.    Given a vehicle with body and finish damage, proper crash manuals and estimation forms, the student will prepare an estimate of repair cost including labor, parts, materials and tax with 100% accuracy.
- II.   Given a vehicle with body and finish damage, proper crash manuals and repair order forms, the student will prepare a work repair order with 100% accuracy.

Course Title    Refinishing Lab III

Course Number   ABG 0209

- I.    Given a vehicle in need of finish repairs, the necessary material, tools and equipment, the student will spot repair and/or overall refinish vehicles of single and multi tones with 90% accuracy.
- II.   Given a car needing trimming and/or pinstriping, the necessary material and tools, the student will apply the trim or pinstriping under the supervision of the instructor with 100% accuracy.

# ENTRY LEVEL COMPETENCIES

| Competency                                                                                                                    | Rationale                                                                                                 | Program Competency                                                                                                                                                   | Evaluation                                                      |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Physical mobility                                                                                                             | Physical tasks of the painter include pushing, moving, bending, and stooping.                             | Measuring, testing, cleaning, moving, and painting components of the automobile.                                                                                     | Determination will be subjective and occur during interview.    |
| 8th grade reading level                                                                                                       | This is the minimum level for texts and manuals pertinent to this program.                                | The student must be able to read collision estimating guide service manuals and comprehend written tests.                                                            | 8th grade level or higher on reading scale.<br><br>CAT level V. |
| Legible handwriting                                                                                                           | A highly desirable trait for an A/B painter.                                                              | Written description of tasks and duties; accomplished reporting and testing to prove one's knowledge of the subjects; must be able to write legible repair estimate. | Application for entry into program.                             |
| Clear verbal communication                                                                                                    | The student must communicate with instructor and fellow students.                                         | To communicate verbally with shop operators and customers. To participate in learning with peers.                                                                    | Interview                                                       |
| Math at minimum 8th grade level. Ability to add, subtract, multiply, and divide whole, mixed, fractional, and decimal numbers | To arrive at correct cost estimate and correct discounts and percentages, also maintain personal records. | To be able to evaluate cost of labor and parts, and also calculate his earned percentage.                                                                            | 8th grade level or higher.<br><br>CAT level V.                  |

| Competency                                                  | Rationale                                                                                                           | Program Competency                                                                                                                                                                                               | Evaluation                                                               |
|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Positive attitude towards work in a structured organization | Painter generally works in shop with highly defined hierarchy                                                       | The student must have respect for fellow workers and his superiors which striving to produce a profit for the employment organization                                                                            | Interview with instructor.<br>Subjective                                 |
| Positive attitude toward working with others and in teams   | A/B painter works in situations requiring cooperation with peers, supervisors, and customers.                       | Ability to produce personal work while assisting peers and supervisors. Able to assist and satisfy customers.                                                                                                    | Interview with instructor.                                               |
| 20 Pride in personal accomplishments and abilities          | The repairman's work is both physical and mentally demanding.                                                       | Self-esteem must be enhanced by the training experience if the student is to succeed in the industry.                                                                                                            | Interview with instructor.                                               |
| Intelligence, reasoning, and comprehension                  | A/B painter requires organization, concentration, memory, and problem solving.                                      | To understand instructor while learning tasks, duties of the painter. To apply problem solving principles of the trade.                                                                                          | No suitable testing is available at this time.                           |
| Manipulative skill and manual dexterity                     | The work of the A/B painter is extremely physical and the use of tools is required. Certain tasks may be hazardous. | The student is required to use hand tools as well as air tool and electric tools. These tools will be used in this program, as well as in the industry. He must function without endangering himself and others. | Subjective by instructor.<br>May lead to extensive testing if indicated. |

# EMPLOYER TASK EVALUATION INSTRUMENT

## AUTO REFINISHING

|                                                     | NECESSARY | DESIRABLE | UNNECESSARY |
|-----------------------------------------------------|-----------|-----------|-------------|
| 1. Mask sections and parts                          |           |           |             |
| 2. Apply corrosion materials                        |           |           |             |
| 3. Clean and prepare repaired surfaces for painting |           |           |             |
| 4. Apply primer surfacer                            |           |           |             |
| 5. Apply primer sealer                              |           |           |             |
| 6. Remove paint and rust                            |           |           |             |
| 7. Spray paint surface panels                       |           |           |             |
| 8. Heat dry painted surfaces                        |           |           |             |
| 9. Spray paint complete vehicle                     |           |           |             |
| 10. Make spot repair on panels                      |           |           |             |
| 11. Detail vehicle for delivery                     |           |           |             |
| 12. Determine and order necessary materials         |           |           |             |
| 13. Determine repair costs                          |           |           |             |
| 14. Repair and maintenance of spray equipment       |           |           |             |
| 15. Remove accessories                              |           |           |             |
| 16. Compound lacquer surfaces                       |           |           |             |
| 17. Pinstripe and decal vehicle                     |           |           |             |
| 18. Spray vinyl dye                                 |           |           |             |
| 19. Determine paint problems and cures              |           |           |             |

## IMPLEMENTATION

These newly designed and organized curricula are proposed for adoption at this time in order that we may implement them with the beginning of the 1980-81 school year. While we were unable to structure the total programs due to extreme expense requirements, each course is individually and carefully charted; this will insure competency acquisition on the part of succeeding students.

As of this time, two tasks remain to be completed in order that we are totally syllabicated. Following is the time schedule for these accomplishments:

June 10, 1980 - Completion of activity flow chart  
for each course outcome

June 30, 1980 - Exemption exams for all courses

In this packet you will find the following for each program:

- I. Program Outcomes and Goals
- II. Program Maps
- III. Course Outcomes and Maps
- IV. Entry Level Competencies
- V. Positional Skills Definition
- VI. Task Identification Questionnaire

The design of the program will benefit the student as each will receive a copy of each course syllabus which spells out specifically what must be done in order to succeed. Our experience with this method in the mechanics programs has met with good acceptance by the students and we feel that it will enhance retention. This system also gives us an efficient and simple system of recording the student's progress and accomplishments. Finally, these documents are expected to be useful in gaining training-related employment for the successful student.

A most important benefit is that we have eliminated the fragmented laboratory sections from the body repair program. Since our labs would need a high budget to insure the presence of particular types of experiences at particular times, we have not been able to perform what was promised. We are now able to be honest with the community in our offerings. This precludes the possibility of lawsuits brought for not fulfilling our contractual agreement.

This design allows new students to enter every term in that the course materials are designed so that any semester's offerings can be first, second or last without depriving the student of learning experiences that will lead to employment.

We hope you will study these documents and see fit to recommend adoption of these improved programs.



PROGRAM: AUTOMOBILE BODY REPAIR  
PROGRAM MANAGER: FELIX BOYD  
DEPARTMENT OF TRANSPORTATION MECHANICS  
PENSACOLA JUNIOR COLLEGE

The Automobile Body Repair program is designed as a one-year Certificate curriculum and as a two-year Associate of Science curriculum. Each program contains the same instruction leading to proficiency in the job entry competencies. The AS curriculum builds upon the basic instruction and adds collegiate general education and one additional course in specialization.

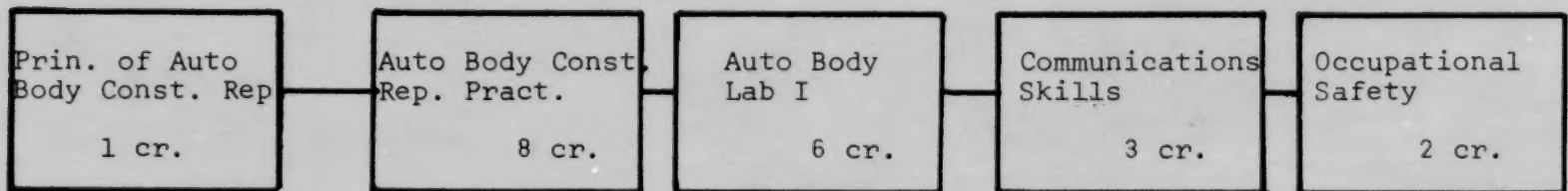
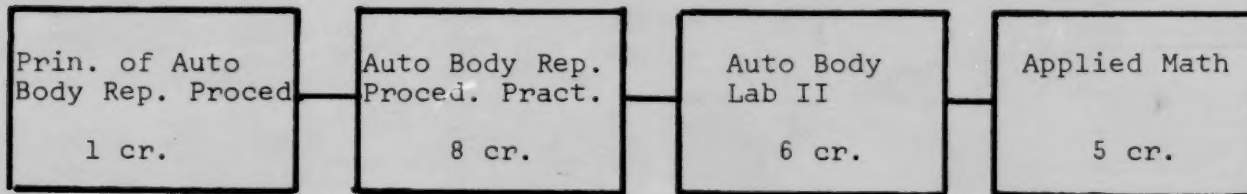
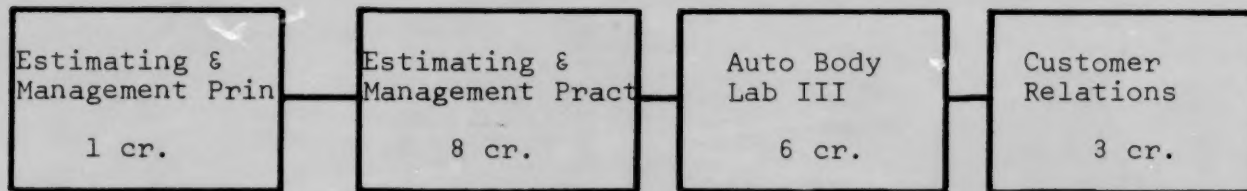
The demonstration of competency is the principle focus of the instruction. The student diagnoses, repairs, straightens, and/or overhauls the various body and frame components of the automobile vehicle. Plans work procedures, materials and parts needed as well as cost of repair with the aid of charts, technical manuals, service bulletins, and collision estimating guides. Disassembles and inspects components to determine whether to repair or replace. Repairs or replaces parts as needed to achieve desired appearance and safe operation of the vehicle. Welds, brazes or uses other type fillers as required to successfully complete repairs. Is knowledgeable of the operational theory of the various components and systems of the vehicle. Proves his workmanship by actually performing the necessary repairs to the satisfaction of the instructor. Communicates with peers, supervisors, and customers regarding his work.



# PROGRAM MAP LEADING TO EARNED CERTIFICATE

The student desiring to earn the Associate of Science degree may pursue this goal by successful completion of the courses listed in the catalog.

Courses in each horizontal grouping below are corequisite.



PROGRAM MAJOR LEARNING OUTCOMES AT CERTIFICATE LEVEL

- I. Placed in a real shop situation, the student will be able to diagnose and repair damages to the body and/or frame of the modern automobile with 100% accuracy.
- II. Placed in a real shop situation, the student will be able to communicate orally and in written form the tasks and duties he/she has performed in the accomplishment of Outcome I above to his/her peers and superiors.
- III. Placed in a real shop situation, the student will be able to demonstrate satisfactory interpersonal relationships with his/her peers and superiors.
- IV. Placed in a real shop situation, the student will be able to realistically evaluate his/her contribution to the operation of the shop.

\*\*\*\*\*

PROGRAM GOALS AT CERTIFICATE LEVEL

- I. The student is prepared to obtain work in a training related field.
- II. The student is equipped to maintain employment in a training related field.
- III. The student is gratified by the performance of training related work.
- IV. The student is prepared to pursue the Associate of Science degree successfully should he/she so desire.

## MAJOR LEARNING OUTCOMES OF COURSES

Course Title    Principles of Auto Body Construction

Course Number    \_\_\_\_\_

- I.    Given a list of different automobiles, the student will identify type of construction with 100% accuracy verbally or in written form.
- II.   Given a specific model of automobile, the student will identify the individual body parts and state their functions with 100% accuracy verbally or in written form.
- III.   Shown assorted body and frame tools and equipment, the student will identify each as to function and name with 100% accuracy verbally or in written form.

Course Title    Auto Body Construction & Repair Practicum

Course Number    \_\_\_\_\_

- I.    Given a vehicle in need of frame repair, the student will demonstrate the necessary hook up and pull procedures using proper tools and equipment with 100% accuracy.
- II.   Given a vehicle with a damaged panel and the pertinent crash manual, the student will determine the repair procedure with 100% accuracy.
- III.   Given a vehicle with a damaged body panel, the student will list the tools, equipment, materials and parts necessary for the repair with 90% accuracy.

Course Title    Auto Body Lab I

Course Number    \_\_\_\_\_

- I.    Given a vehicle with a damaged body panel, proper manuals and equipment, the student will make the necessary repairs with 100% accuracy.
- II.   Given a vehicle with a damaged frame, proper manuals and equipment, the student will make the necessary repairs and corrections with 100% accuracy.

Course Title Principles of Auto Body Repair Procedures

Course Number \_\_\_\_\_

- I. Given a word problem dealing with a damaged automobile of specific make, year, and model, the student will select the proper crash manual with 100% accuracy.
- II. The student will locate the proper repair procedure in the proper crash manual for the above word problem with 100% accuracy.

Course Title Auto Body Repair Procedures Practicum

Course Number \_\_\_\_\_

- I. Given a vehicle in need of panel replacement or repair, the student will select the proper tools and outline the procedure to the instructor with 100% accuracy.
- II. Given a diagram of automotive glass and trim components, the student will identify the components, their functions and characteristics with 90% accuracy.
- III. Given an automobile door in proper working order, the student will identify all mechanical parts, remove and reinstall them in the same door in proper working order.
- IV. Given a diagram of an automobile, the student will identify all exterior ornamentation with 100% accuracy.

Course Title Auto Body Lab II

Course Number \_\_\_\_\_

- I. Given vehicles in need of panel replacement and proper guides, tools and material, the student will make the panel replacement to manufacturer's specifications.
- II. Given vehicle in need of glass and trim replacement, necessary guides, tools and material, the student will make the proper replacement and adjustment to manufacturer's specifications.

- III. Given vehicles with faulty door mechanisms, proper guides, tools and material, the student will make repairs to return the units to manufacturer's specifications.
- IV. Given vehicles in need of repairs to exterior ornamentation and accessories, proper manuals, tools and material, the student will make the needed repairs in accordance with manufacturer's specifications.

Course Title     Estimating and Management Principles

Course Number     \_\_\_\_\_

- I. Given word problems dealing with automobiles, the student will select the proper estimating guide, prepare estimates, complete customer billing and gross profit with 100% accuracy.
- II. Given word problems dealing with the auto body repair shop in the areas of shop safety, inventory control, repair orders, payroll and shop management, the student will solve and report solutions in accordance with the instructor's guidelines.

Course Title     Estimating and Management Practicum

Course Number     \_\_\_\_\_

- I. Given damaged vehicles, appropriate estimating guides and forms, the student will prepare repair estimates included labor, materials, refinishing and taxes with 100% accuracy.
- II. Given damaged vehicles entering the shop, the student will prepare repair orders, assign work details, order necessary parts and materials, oversee repair and prepare mock payroll in accordance with instructor's guidelines.

Course Title    Auto Body Lab III

Course Number    \_\_\_\_\_

- I.    Placed in a simulated auto body shop situation, the student will demonstrate the ability to transmit work instructions to his/her peers.
- II.   Placed in a simulated shop situation, the student will demonstrate his/her ability to carry out work instructions of the instructor and peers in a cooperative manner.



TO: Industry Representatives and Graduates  
FROM: Felix Bovd, Instructor, Auto Body Repair  
DATE:

In order that we may be able to provide you with (1) graduates able to develop within industry and (2) upgraded technicians, we need information from you to assist us in updating our courses. We have listed a group of tasks which we are asking you to evaluate. The evaluation system is fairly simple. Please examine each task and make a determination regarding it. Some, I am certain, are necessary; others desirable. Yet some others will not be needed. Please indicate your decisions, since this is the best method we have to plan for future course improvements. Please add any needed additional tasks.

While making your decisions, please bear in mind that we are a post-secondary or college level institution and our programs are aimed at something slightly above pure "entry" level.

Your cooperation is greatly appreciated in this effort and we hope to become more useful to you as an educational facility as time progresses.

# EMPLOYER TASK EVALUATION INSTRUMENT

## AUTO BODY REPAIR

|                                                           | NECESSARY | DESIRABLE | UNNECESSARY |
|-----------------------------------------------------------|-----------|-----------|-------------|
| 1. Inspect body and frame and measure alignment           |           |           |             |
| 2. Straighten, repair and align body and frame of vehicle |           |           |             |
| 3. Striaghten deformed auto body sheet metal              |           |           |             |
| 4. Remove and install weld-in panel                       |           |           |             |
| 5. Align hood and deck panels                             |           |           |             |
| 6. Remove and install fenders                             |           |           |             |
| 7. Remove and install doors                               |           |           |             |
| 8. Remove and replace bumpers                             |           |           |             |
| 9. Replace fiberglass body panels                         |           |           |             |
| 10. Repair fiberglass panels                              |           |           |             |
| 11. Estimate cost of repairs                              |           |           |             |
| 12. Align head lamps                                      |           |           |             |
| 13. Fill and smooth depressed areas with body filler      |           |           |             |
| 14. Pick, file and finish metal                           |           |           |             |
| 15. Shrink damaged metal areas                            |           |           |             |
| 16. Weld vehicle body parts                               |           |           |             |
| 17. Weld frames or frame horns                            |           |           |             |
| 18. Fill depressed areas with body solder                 |           |           |             |

|                                                               | NECESSARY | DESIRABLE | UNNECESSARY |
|---------------------------------------------------------------|-----------|-----------|-------------|
| 19. Replace moldings and hardware                             |           |           |             |
| 20. Remove and replace grills                                 |           |           |             |
| 21. Replace locks and latches                                 |           |           |             |
| 22. Repair manual seat tracks                                 |           |           |             |
| 23. Remove, replace and adjust power                          |           |           |             |
| 24. Repair or replace window raising and lowering mechanisms  |           |           |             |
| 25. Repair power window control units                         |           |           |             |
| 26. Remove and replace seat and shoulder belts                |           |           |             |
| 27. Remove damaged door glass and install replacement         |           |           |             |
| 28. Remove front and rear windows and install replacement     |           |           |             |
| 29. Seal leaks around windshield, rear window and back lights |           |           |             |
| 30. Adjust or align windows in doors                          |           |           |             |
| 31. Determine repair costs                                    |           |           |             |
| 32. Order parts and materials                                 |           |           |             |

# ENTRY - LEVEL COMPETENCIES

| COMPETENCY                                                                                                                    | RATIONALE                                                                                                  | PROGRAM COMPETENCY                                                                                                                                                   | EVALUATION                                            |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| 8th grade reading level                                                                                                       | This is the minimum level for texts and manuals pertinent to this program.                                 | The student must be able to read collision estimating guide, service manuals, and comprehend written instructions.                                                   | 8th grade level or higher on reading scale CAT Level. |
| Legible handwriting                                                                                                           | A highly desirable trait for an auto body repairman.                                                       | Written description of tasks and duties accomplished. Reporting and testing to prove one's knowledge of the subjects. Must be able to write legible repair estimate. | Application for entry in program.                     |
| Clear verbal communications                                                                                                   | The student must communicate with instructor and fellow students.                                          | To communicate verbally with shop operators and customers. To participate in learning with peers.                                                                    | Interview                                             |
| Math at minimum 8th grade level. Ability to add, subtract, multiply, and divide whole, mixed, fractional and decimal numbers. | To arrive at correct cost estimate and correct discounts and percentages. Also, maintain personal records. | To be able to evaluate cost of labor and parts and also calculate his earned percentages.                                                                            | 8th grade level or higher on CAT Level V.             |

# ENTRY - LEVEL COMPETENCIES

| COMPETENCY                                                   | RATIONALE                                                                                     | PROGRAM COMPETENCY                                                                                                                    | EVALUATION                                              |
|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| Positive attitude towards work in a structured organization. | Repairmen generally work in shops with highly defined hierarchy.                              | The student must have respect for fellow workers and his superiors while striving to produce a profit for the employing organization. | Interview with instructor subjective.                   |
| Positive attitude toward working with others and in teams.   | Body repairmen work in situations requiring cooperation with peers, superiors, and customers. | Ability to produce personal work while assisting peers and superiors. Able to assist and satisfy customers.                           | Subjective evaluation during interview with instructor. |
| Pride in personal accomplishments and ability.               | The repairman's work is both physically and mentally demanding.                               | Self-esteem must be enhanced by the learning experience if the student is to succeed in industry.                                     | Subjective evaluation during interview with instructor. |
| Intellegence, reasoning, and comprehension.                  | Auto Body Repairmen require organization, concentration, memory, and problem solving.         | To understand instructions while learning tasks and duties of the repairman. To apply problem-solving principles of the trade.        | No suitable testing document available at this time.    |

# ENTRY - LEVEL COMPETENCIES

| COMPETENCY                               | RATIONALE                                                                                                                   | PROGRAM COMPETENCY                                                                                                                                                                                                | EVALUATION                                                            |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Manipulative skill and manual dexterity. | The work of the auto body repairman is extremely physical and the use of tools is required. Certain tasks may be hazardous. | The student is required to use hand tools as well as electrical, pneumatic, and welding. These tools will be used in this program as well as in industry. He must function without endangering himself or others. | Subjective by instructor. May lead to extensive testing if indicated. |
| Physical mobility.                       | Physical tasks of the repairman include lifting, moving, bending, and stooping.                                             | Measuring, testing, cleaning, moving, disassembling and assembling, installing and straightening components of the automobile.                                                                                    | Determination will be subjective and occur during interview.          |



PROGRAM: BUILDING MAINTENANCE

PROGRAM MANAGER: ANDREW HOUSAND  
DEPARTMENT OF ENGINEERING & CONSTRUCTION  
PENSACOLA JUNIOR COLLEGE

The Building Maintenance Technology Program is designed to provide students with the necessary skills to cope with the maintenance requirements of modern office, industrial, educational and residential buildings. These complex operations call for a variety of skills to be learned by the Building Maintenance student.

The course provides basic information and selected practical applications in the subject areas of carpentry, painting and decorating, plumbing and electrical, masonry and concrete, roofing and siding, basic blueprint reading, construction estimating, and related topics that blend into these major areas.

Students who have a need to become Building Maintenance supervisors, contractors or to improve on Do-It-Yourself skills can benefit by enrolling in Building Maintenance Technology.

#### Term I

|          |                           |       |
|----------|---------------------------|-------|
| BMT 0107 | Concrete & Masonry Theory | 4 cr. |
| BMT 0108 | Concrete & Masonry Lab    | 4     |
| BMT 0103 | Roofing and Siding Theory | 3     |
| BMT 0104 | Roofing and Siding Lab    | 2     |
| OCS 0101 | Occupational Safety       | 2     |
|          | Basic Blueprint Reading   | 3     |
| MAP 0101 | Applied Mathematics I     | 5     |

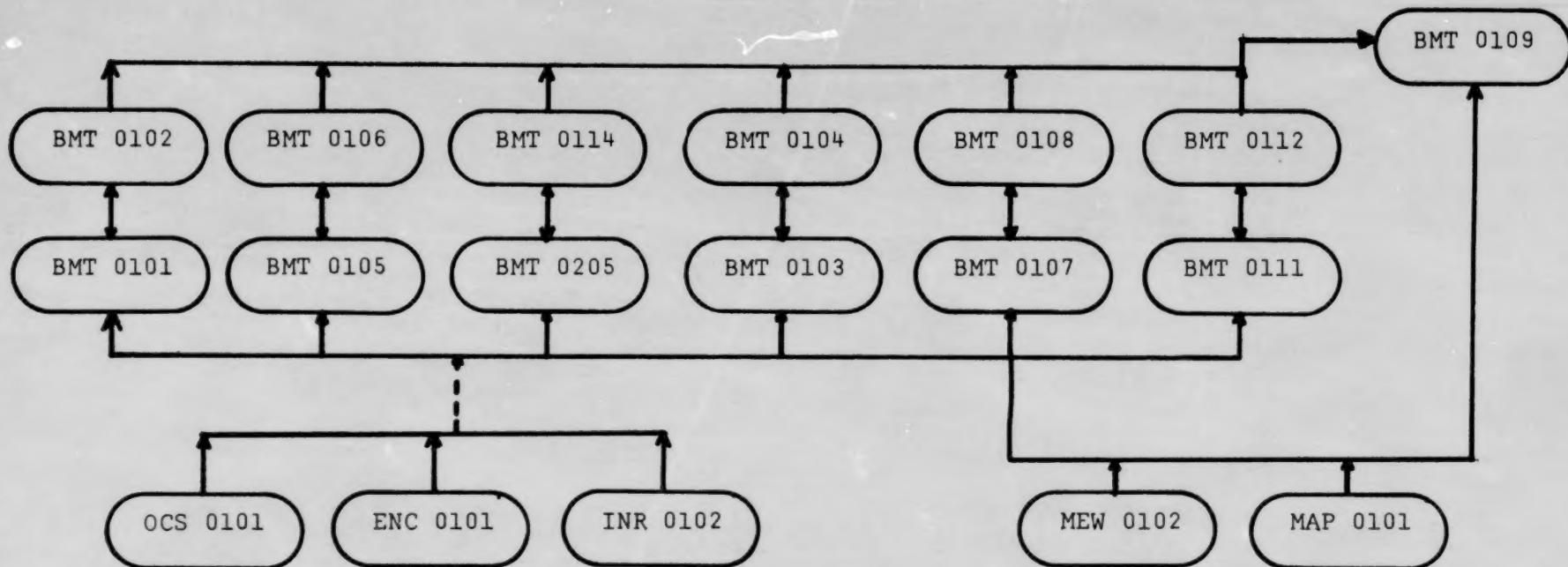
#### Term II

|          |                          |   |
|----------|--------------------------|---|
| BMT 0105 | Interior Finishes Theory | 2 |
| BMT 0106 | Interior Finishes Lab    | 2 |
| BMT 0101 | Carpentry Theory         | 3 |
| BMT 0102 | Carpentry Lab            | 4 |
| BMT 0109 | Construction Estimating  | 5 |
| ENC 0101 | Communications Skills    | 3 |

#### Term III

|          |                                |   |
|----------|--------------------------------|---|
| INR 0102 | Industrial Relations           | 4 |
| BMT 0111 | Electrical and Plumbing Theory | 5 |
| BMT 0112 | Electrical and Plumbing Lab    | 4 |
| BMT 0205 | Painting Theory                | 5 |
| BMT 0114 | Painting Lab                   |   |

PROGRAM MAP  
BUILDING MAINTENANCE TECHNOLOGY CERTIFICATE



### Major Learning Outcomes of Program

1. Identification and proper usage of all hand tools, portable power tools, and stationary shop tools used within the scope of the trade associated courses of the program.

2. Development of necessary manipulative skills and techniques associated with the building trade courses of the program.

3. Identification and proper usage of related building materials to include brick and masonry, lumber, plumbing and electrical, paint coverings, roofing supplies and other relevant materials.

4. Development of sound safety practices consistent with standards established by local, state and federal agencies and the guidelines of the OSHA.

5. Capability of diagnosing, interpreting and developing estimates based on a working set of drawings and detailed specifications.

## LEARNING OBJECTIVES OF COURSES

### BMT 0101 - Carpentry Theory --- 3 Technical Credit Hours

#### Learning Outcomes

1. Given the necessary materials, the student will correctly identify and determine selected uses of a variety of building materials (lumber, trim, roofing, and hardware). Acceptable written accuracy identifying materials and uses will be in the 90th percentile.
2. Given a layout of the necessary hand and portable power tools, the student will list and demonstrate the proper safety practices for all categories of tools. Acceptable written and demonstrated accuracy will be 100%.
3. Given a series of computation problems, the student will analyze requirements and develop a list of building supplies necessary to build subsections of a small residential building. Board feet, square feet, and linear feet estimates will be accurate within 10%.

### BMT 0102 - Carpentry Lab --- 4 Technical Credit Hours

#### Learning Outcomes

1. Given the necessary tools and materials, the student will demonstrate the ability to measure and cut a common rafter for a 4 in 12 slope roof with a two foot overhang on a 20' span building. Accuracy will conform to standards established on the Stanley R-100 framing square.
2. Given the necessary tools and materials, the student will frame a 8' X 10' wall with studs on 16' centers. Wall will include one door and one window. Time allowance will not exceed two hours.
3. Given the necessary tools and materials, the student will build one-half of a 20' span truss on a 4 in 12 slope using plywood gussets. American Fink truss standards will be the criteria for satisfactory completion.

BMT 0103 - Roofing and Siding Theory --- 3 Technical Credit Hours

Learning Outcomes

1. Given the necessary materials, the student will identify and state preferred uses for six types of selected roofing materials, and the method of application for each category. Accuracy will be 100%.
2. Given the necessary materials, the student will pass a written test on safety with ladders and scaffolding. OSHA standards will be the basis for evaluation. Accuracy will be in the 90th percentile.
3. Given the necessary materials, the student will be able to identify fifteen selected types of roofing materials, state the total square foot coverage for each, and the recommend insurance underwriters guarantee for each category. Accuracy should be in the 90th percentile.

BMT 0104 - Roofing and Siding Lab --- 2 Technical Credit Hours

Learning Outcomes

1. Given the necessary tools and materials, the student will demonstrate the correct method for installing RB & B siding over a 8' X 10' wall. Completed siding must be plumb and nailing pattern must comply with FHA/VA standards.
2. Given the necessary tools and materials, the student will demonstrate the correct method for installing asphalt shingles over an existing roof. Alignment/ (vertical and horizontal) and nailing pattern will be the basis for evaluation.
3. Given the necessary tools and materials, the student will demonstrate the correct method for installing flashing around chimneys and valley metal in open valleys.

BMT 0105 - Interior Finishes Theory --- 2 Technical Credit Hours

Learning Outcomes

1. Given necessary materials, the student will identify and state preferred uses of six types of selected wall covering and methods of application for each category. Acceptable accuracy will be 100%.
2. Given the necessary materials, the student will identify and list ten types of floor coverings and the method of application for each category. Acceptable accuracy will be 100%.
3. Given the necessary materials, the student will specify the various dimensions for standard base, wall, and special cabinets. Criteria will be that developed by the American Plywood Association.

BMT 0106 - Interior Finishes Lab -- 2 Technical Credit Hours

Learning Outcomes

1. Given the necessary tools and materials, the student will install vinyl floor covering over a 75 square foot bathroom using standard tile adhesive. Alignment and jointing adjacent to installed bathtub and cabinets will not exceed a 1/8" gap.
2. Given the necessary tools and materials, the student will install 12" X 12" tongue and groove ceiling tile over a 100 S.F. ceiling. Furring strips will be required and the installation will be split between a staple method and an adhesive method. Border tile will be symmetrical for a satisfactory performance.
3. Given the necessary tools and materials, the student will prepare and hang two sections (4' X 8') of dry wall over a framed wall section containing one window and one door. Joint finishing will include bedding coat, taping, and one smoothing coat. Time allowance for work will not exceed two hours.



BMT 0107 - Concrete and Masonry Theory --- 4 Technical Credit Hours

Learning Outcomes

1. Given a brick sample sheet showing three dimensions with American measurements, the student will list and record the proper names of 16 out of 24 bricks. Time allowance is 15 minutes.
2. Given the necessary materials, the student will identify and state the advantages and disadvantages of the six brick bonds currently in use in American brick masonry. Accuracy will be 100%.
3. Given the necessary materials, the student will correctly identify the masonry tools routinely found in the masons canvas bag. Accuracy will be in the 90th percentile.

BMT 0108 - Concrete and Masonry Lab --- 4 Technical Credit Hours

Learning Outcomes

1. Given the necessary brick masonry tools and materials, the student will lay an 8" thick (double standard brick) corner wall with metal ties according to a detailed project sheet. Finished project must be square on corner surface, plumb vertically and leveled horizontally. Mortar joints must average  $3/8"$ . Time allowance should not exceed two hours.
2. Given the necessary tools and materials, the student will form up, manually mix (portable mixer), and pour a one cubic yard batch of concrete. Bull-floating, edging, finish floating will be evaluated in stages. Finished slab will be checked for levelness on all sides and on diagonals.
3. Given the necessary tools and materials, the student will lay up a 12" X 12" hollow pier according to a detailed project sheet. Pier will be plumb, square, and joints will average  $3/8"$ .

BMT 0111 - Electrical and Plumbing Theory --- 5 Technical  
Credit Hours

Learning Outcomes

1. Given Ohms Law in diagram form, the student will be able to compute answers to problems involving resistance, amperage, and voltage. Accuracy will be in the 90th percentile.
2. Given a chart depicting various fittings in galvanized, copper and plastic, the student will identify the fittings with the correct names. Accuracy will be in the 90th percentile.
3. Given a set of working drawings, the student will compute the necessary "drainage fixture units" required to comply with plans and specifications. Accuracy will be 100%.

BMT 0112 - Electrical and Plumbing Lab --- 4 Technical  
Credit Hours

Learning Outcomes

1. Given a bathroom mock-up and necessary tools and materials, the student will install a standard American water closet. Finished project will be functional to include cold water supply line with shut off valve. Toilet will be test flushed three times without apparent leaks for satisfactory completion.
2. Given an electrical malfunctioning bedroom circuit, the student will trouble shoot the defective area with testing equipment and apply corrective measures to insure all electrical units are workable.
3. Given the necessary materials, the student will demonstrate his ability to join selected plumbing fittings and straight runs of pipe. Materials will include galvanized, copper, and PVC. Criteria for satisfactory completion will be non-leakage at assembled joints.

BMT 0205 - Painting Theory --- 5 Technical Credit Hours

Learning Outcomes

1. Given a display of abrasives, the student will name and state the preferred uses of each. Accuracy will be in the 90th percentile.
2. Given a listing of popular paints and varnishes, the student will match the correct solvent to be used for each covering. Accuracy will be 100%.
3. Given a display of brushes, the student will identify and state the advantages and disadvantages of each. Accuracy will be in the 90th percentile.

BMT 0114 - Painting Lab --- 2 Technical Credit Hours

Learning Outcomes

1. Given the necessary tools and materials, the student will demonstrate the proper method of applying finish over a 4' X 8' plywood panel with pressure operated spray equipment. Demonstration will stress compressor preparation, spraying technique, and cleanup. Finished product will be free of laps, streaks and sags.
2. Given the necessary tools and materials the student will demonstrate use of the telescopic roller by painting a ceiling of selected dimensions. Evaluation will stress preparation, technique, and cleanup.
3. Given the necessary tools and materials, the student will prepare and finish painting a six-over-six wooden window assembly on the interior portion of a room in 45 minutes. Paint overlap on glass will not exceed 1/32".

BMT 0109 - Construction Estimating --- 5 Technical Credit Hours

Learning Outcomes

1. Given a set of working drawings, the student will develop a detailed quantity take-off and labor estimate to include overhead and profit for the specifications developed by the architect and builder. Final dollar value attained by the student cannot exceed 10% of the instructor developed solution.

MEW 0102 - Blueprint Reading --- 3 Technical Credit Hours

Learning Outcomes

1. Given a set of working drawings, the student will identify selected symbols in writing. Accuracy will be in the 90th percentile.
2. Given a working set of drawings, the student will list RO, window and door size and type for all openings in the building. Accuracy will be 100%.

INDUSTRIAL TASK ANALYSIS  
BUILDING MAINTENANCE TECHNOLOGY

TO: Industry Representatives and Graduates

FROM: Andy Housand/Instructor, Building Maintenance  
Technology Program

DATE:

In order that we may provide you with (1) graduates capable of working in industry and (2) upgraded technicians, we need information from you to assist us in updating and revamping our courses. We have formulated a group of tasks which we are asking you to evaluate. Please carefully evaluate each task and make a determination concerning its relative validity. Some tasks are crucial, some quasi-necessary, others unnecessary. Please respond and indicate your decisions since this is the best method at the present time for incorporating your input. Add any additional tasks you deem necessary.

While evaluating our instrument, please bear in mind that we are a post-secondary institution and our programs reflect content above the pure "entry" level.

Your cooperation in this effort is greatly appreciated and we hope to become more useful to you as an educational facility as we develop more skill in this endeavor.

## TASK ANALYSIS

The student upon completion of the Building Maintenance Technology program should be able to:

|                                                                           | NECESSARY | DESIRABLE | UNNECESSARY |
|---------------------------------------------------------------------------|-----------|-----------|-------------|
| 1. Identify and demonstrate proper use of carpentry tools and equipment.  |           |           |             |
| 2. Identify and demonstrate proper use of masonry tools and equipment.    |           |           |             |
| 3. Identify and demonstrate proper use of plumbing tools and equipment.   |           |           |             |
| 4. Identify and demonstrate proper use of electrical tools and equipment. |           |           |             |
| 5. Identify and demonstrate proper use of painting tools and equipment.   |           |           |             |
| 6. Install and/or repair and maintain floor coverings.                    |           |           |             |
| 7. Install and/or repair and maintain wall coverings.                     |           |           |             |
| 8. Install and/or repair and maintain ceiling tiles.                      |           |           |             |
| 9. Install and/or repair and maintain brick and masonry units.            |           |           |             |
| 10. Install and/or repair and maintain roofing and siding coverings.      |           |           |             |
| 11. Install and/or repair and maintain electrical wiring and fixtures.    |           |           |             |
| 12. Install and/or repair and maintain plumbing systems.                  |           |           |             |
| 13. Read and interpret working sets of drawings.                          |           |           |             |
| 14. Prepare detailed construction estimates.                              |           |           |             |
| 15. Exhibit familiarity with OSHA standards.                              |           |           |             |
|                                                                           |           |           |             |



## BUILDING MAINTENANCE TECHNOLOGY

The Utilization Plan will include:

1. Orientation of all new and continuing students on the core courses, corequisite courses, and supporting courses from outside departments.
2. Issuance of the program map.
3. Inclusion of all learning outcomes in the appropriate section of the course syllabus.
4. Discussion by one of the Vocational Counsellors on the general education options open to students desiring to pursue AS and/or AA degrees.

REFERENCES OBTAINED THROUGH  
THE FLORIDA RESOURCES IN EDUCATION EXCHANGE

ED170614      CE021544  
Commercial Carpentry: Instructional Units. (Diehl, Donald W.)

ED169370      CE020555  
Block Masonry. Kit No. 81 (Instructor's Manual and Student Learning Activity Guide. (Johnson, Theodore)

ED164847    08 CE018793  
Instructional Support System--Occupational Education.  
Building Industries Occupations. (Abramson, Theodore)

ED164805      CE018239  
Competency-Based Preservice Construction Trades Curriculum,  
Phase II. Final Report. (Nelms, Howard F.)

ED156922      CE017450  
Bricklaying Curriculum. Instructional Units. (Turcotte,  
Raymond J.)

ED156920      CE017410  
Cement Mason's Curriculum. Instructional Units. (Hendrix,  
Laborn J.)

ED141623      CE011908  
Curriculum Guide for Building Construction. (Oregon State  
Board of Education, Salem)

ED128571      CE007565  
Electricity (Construction). Trade and Industrial Education  
Trade Preparatory Training Guide. (Nebraska State Dept.)

ED128566      CE007560  
Plumbing and Pipefitting. Trade and Industrial Education  
Trade Preparatory Training Guide. (Nebraska State Dept.  
of Education)

ED128564      CE007558  
Painting and Decorating. Trade and Industrial Education  
Trade Preparatory Training Guide. (Nebraska State Dept.  
of Education)

PROGRAM: BUSINESS

PROGRAM MANAGER: D. L. STEVENSON  
DEPARTMENT OF BUSINESS ADMINISTRATION  
PENSACOLA JUNIOR COLLEGE

The Business Terminal Program is a two year program which results in the granting of an Associate of Science Degree to the student who expects to enter business at the end of the sophomore year. The graduate should be able to enter and successfully compete for positions in such industries as manufacturing, banking, merchandising, transportation, insurance, communications, utilities, and government service work. The program provides education that will prepare the student for entry level employment as a junior executive, supervisor, or foreman, or as a proprietor or partner in his own business.

Examples of specific positions are as follows:

|                                     |                             |
|-------------------------------------|-----------------------------|
| Bookkeeper                          | Personnel Mgr's Assistant   |
| Bank Trainee/Teller                 | Purchasing Agent            |
| Claims Adjuster                     | Specialty Store Salesman    |
| Credit Collector                    | Union Business Agent        |
| Cost Estimator                      | Real Estate Agent           |
| Insurance Agent                     | Real Estate Closer          |
| Inventory Supervisor                | Business Forms Analyst      |
| Job Analyst                         | Variety Store, Dept Manager |
| Labor Relations Specialist          | Dept. Store, Mgr. Trainee   |
| Manufacturers' Sales Representative |                             |
| Personnel Interviewer               |                             |

## Freshman Year

### Term I

|          |                |       |
|----------|----------------|-------|
| GEB 1011 | Business       | 3 cr. |
| ENC 1103 | English Comp   | 3     |
| — —      | Social Studies | 3     |
| — —      | Biology (4)    | 3     |
| — —      | Elective       | 3     |

### Term II

|          |                       |   |
|----------|-----------------------|---|
| COC 1300 | Intro to Computers    | 3 |
| MAR 2011 | Marketing             | 3 |
| ENC 1136 | English Comp          | 3 |
| FIN 2000 | Principles of Finance | 3 |
| — —      | Humanities            | 4 |

## Sophomore Year

### Term I

|          |                         |   |
|----------|-------------------------|---|
| ACC 2001 | Accounting              | 3 |
| ECO 2013 | Economics               | 3 |
| BUL 2111 | Business Law            | 3 |
| COM 2100 | Business Communications | 3 |
| SPC 1020 | Speech                  | 3 |

### Term II

|          |                    |   |
|----------|--------------------|---|
| ACC 2021 | Accounting         | 3 |
| ECO 2023 | Economics          | 3 |
| BUL 2112 | Business Law       | 3 |
| MAN 2000 | Management         | 3 |
| MAN 2930 | Management Actions | 3 |

### Proposed Program Changes

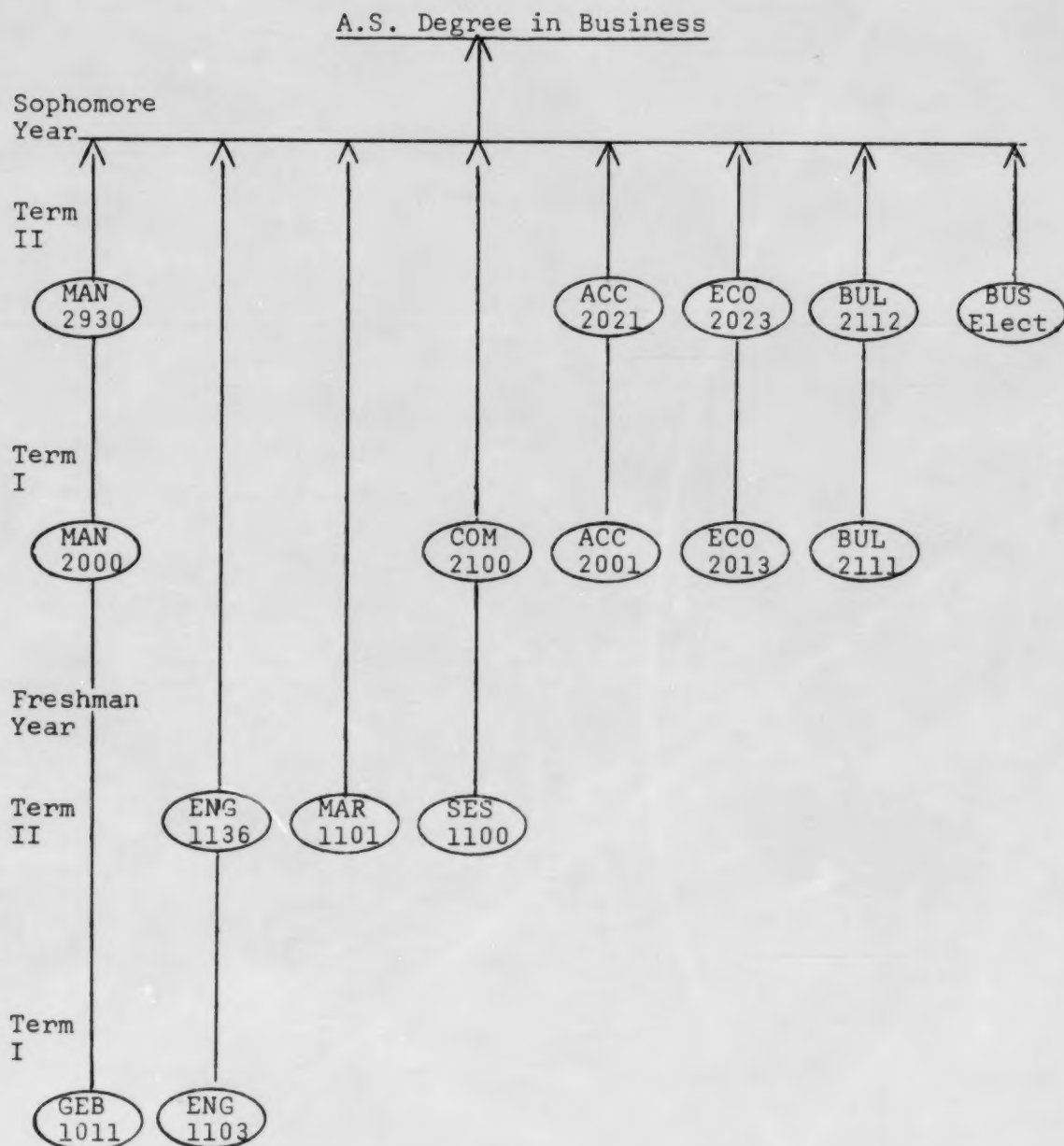
The program is currently serving the needs of both student and employer. The suggested program changes are minor in nature. The first proposed change is in course sequence and places MAN 2000 in Term II of the sophomore year as a prerequisite to MAN 2930. The second proposed change is to eliminate SPC 1030 in Term I of the sophomore year and add a business elective in Term II of the sophomore year.

MAN 2000 is the principles course in management and would better prepare the student to complete MAN 2930 rather than having the courses as corequisites.

MAR 1101 requires the students to give sales presentation to small groups using basic principles of human behavior and understanding. I believe this course and SPC 1020 are redundant. By eliminating SPC 1020 as a program requirement the student will have more flexibility and can select an additional business course of his choice.

Proposed Program Map for: Business

Developed by: Dennis Stevenson  
Department of Business  
Administration





## Business Terminal Program

### Learning Outcomes:

1. The graduate will be able to distinguish between micro and macro economics and apply their major theorems to specific business applications.
2. Given case situations in the area of management a graduate will be able to identify the major problems and apply the appropriate management principles in determining a solution.
3. Given an accounting practice set the graduate will be able to record, classify, and summarize business transactions and interpret their effects on the business firm.
4. The graduate will be able to describe the functions of a legal system, explain the legal system as an aspect of the business environment, and the major principles governing the law in selected fields.
5. The graduate will be able to compare and contrast the major forms of business ownership used in this country.

## Business Terminal Program

### Learning Outcomes for Core Courses:

#### Principles of Management - MAN 2000 --- The student will be able to:

1. Distinguish between major types of plans and apply each to specific business situations.
2. Identify the steps in the organization of work.
3. Identify and apply the techniques of directing in such areas as training, performance rating, and the providing of work incentives.
4. Describe the methods of controlling worker output.

Learning Outcomes for Core Courses (cont.)

Management Actions - MAN 2930 --- The student will be able to:

1. Apply the factors of production, marketing, and finance to a simulated business game.
  2. Participate on a team representing a simulated business in competition with other classroom teams for highest productive output and marketing results based on return on investment.
- 
- 

Introduction to Business - GEB 1011 --- The student will be able to:

1. Analyze the free enterprise system.
2. Differentiate between various forms of business ownership.
3. Apply the principles used in operating a small business.

Salesmanship - MAR 2011 --- The student will be able to:

1. Discuss the selling/buying behavior of consumers versus industrial buyers.
2. Discuss the major approaches to selling strategy.
3. Demonstrate a selling situation using the commonly used tactics in a sales presentation.

Accounting I - ACC 2001 --- The student will be able to:

1. Work problems demonstrating the application of the accounting cycle.
2. Prepare the various financial statements required by a sole proprietorship.

Accounting II - ACC 2021 --- The student will be able to:

1. Work problems demonstrating the application of rules concerning taxes cost accounting, and analysis of financial statements.
2. Prepare the various financial statements required by partnerships and corporations.

Economics I - ECO 2013 --- The student will be able to:

1. Describe the american economics system and discuss the use of economic measuring devices.
2. Identify policies which would keep the economy operating effectively.

Economics II - ECO 2023 --- The student will be able to:

1. Describe the process of economic model building.
2. Provide an analyses of product and resource markets.

Business Law I - BUL 2111 --- The student will be able to:

1. Identify the issues in a given legal case or situation.
2. Apply the basic principles of law as they pertain to the areas of contracts, commercial paper, and related areas.

Business Law II - BUL 2112 --- The student will be able to:

1. Demonstrate the ability to explain a line of legal reasoning in the areas of Sales, Real Property, and related areas.
2. Demonstrate the ability to interpret the legal language of court decisions through the use of written assignments.

Worker Expectation Form: Business Administration -  
Management Program

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Person Interviewed: \_\_\_\_\_

Graduate: \_\_\_\_\_

Non applicable  
Un-necessary  
Desirable  
Necessary  
Very Necessary

|                                                                                 |  |  |  |  |  |
|---------------------------------------------------------------------------------|--|--|--|--|--|
| 1. Use initiative in carrying out duties                                        |  |  |  |  |  |
| 2. Change work priorities                                                       |  |  |  |  |  |
| 3. Influence people's attitude                                                  |  |  |  |  |  |
| 4. Influence people's opinions about work and the company                       |  |  |  |  |  |
| 5. Analyze problems when procedures or systems break down                       |  |  |  |  |  |
| 6. Be precise in execution of exact detail or stick to policy and job standards |  |  |  |  |  |
| 7. Use imagination and confidently tackle problems                              |  |  |  |  |  |
| 8. Accept close direction from immediate supervisor                             |  |  |  |  |  |
| 9. Assume responsibility for new decisions without passing the buck             |  |  |  |  |  |
| 10. Have patience in performing routine and repetitive work                     |  |  |  |  |  |
| 11. Get work completed at a fast pace for self and for setting pace for others  |  |  |  |  |  |
| 12. Get enthusiasm and interest from others about taking actions                |  |  |  |  |  |
| 13. Avoid distractions to provide efficiency of completed work                  |  |  |  |  |  |

Non applicable  
Un-necessary  
Desirable  
Necessary  
Very Necessary

14. Delegate job tasks to others for completion

15. Willingness to work steadily and in harmony with others doing the same or related kinds of work

16. Plan for follow-up and inspection of delegated work

17. Explain job expectations to subordinates

18. Develop alternative actions by trial and error method

19. Develop potential in subordinates through job coaching

20. Maintain composure in high pressure or stress situations

21. Listen to others

22. Respond to job action when structure or supervisor is not present

### Plan of Utilization

This project has provided the opportunity to review the Business Terminal Program for relevancy and its applicability to the current needs of both the student and his future employer. Through the evaluation of learning outcomes, it has become easier to be much more specific when discussing the objectives and goals of both the program and the individual courses within the program. This project has also enabled me to examine the relationships in learning outcomes between the various courses in the program as well as the core business courses. I believe that those of us within the Department of Business Administration who have participated in this project have gained a greater understanding of our various course requirements and the needs of the students. The process of mapping is an excellent technique for providing a visual representation of the course requirements within the program. For purposes of counseling, a program map is far superior to a listing of courses or referring to the catalogue. I believe the ideal situation would be to have every member of the Department of Business Administration participate in a project of this type so as to facilitate the exchange of ideas concerning course content, learning objectives, and student and potential employer needs.



REFERENCES OBTAINED THROUGH  
THE FLORIDA RESOURCES IN EDUCATION EXCHANGE

ED105914      JC750307  
An Evaluation of Individualized Instruction for Evening/Part-  
Time Students of Business Administration. (Sutherland,  
Alphonzo, A.)

ED148843      TM006728  
Assessing Occupational Competences--A CAEL Handbook.  
(Sharon, Amiel T.)

ED150327      CE014516  
Teaching General Business. (Brown, Betty Jean)

ED164074      JC790086  
Academic Standards. Fall 1978. (Delaware Technical and  
Community College, Dover)

PROGRAM: CIVIL ENGINEERING TECHNOLOGY

PROGRAM MANAGER: RICHARD C. WALLACE, ARCHITECT  
DEPARTMENT OF ENGINEERING & CONSTRUCTION  
PENSACOLA JUNIOR COLLEGE

The graduate of the two year Civil Engineering Technology program receives an Associate or Science Degree. He or she is job-entry level acceptably trained for immediate employment as a survey crew member (in all capacities), civil engineering draftsman, trainee with technical and theoretical knowledge in soil analysis and testing, construction layout engineer trainee, and highway layout and development apprentice. Formal education may be continued to certain four year universities with the A.S. course-work applicable toward a degree in Construction Management and Engineering Technology.

The program graduate has a solid foundation in the technical and the theoretical principles of the profession of Civil and Structural Engineering. The basic codes, standards, and Zoning Ordinances pertaining practice in Engineering are reviewed and used as the criteria for the work performed. Core courses give the graduate the social, legal, and humanistic aspects of Engineering and Construction and their relationship to the public welfare.

# CIVIL ENGINEERING TECHNOLOGY A.S.

## FRESHMAN YEAR

| <u>TERM I</u> |                         | <u>CREDITS</u> |
|---------------|-------------------------|----------------|
| MTB 1321      | Technical Math I        | 3              |
| ENC 1103      | English Composition     | 3              |
| BCN 1280      | Properties of Materials | 3              |
| EGN 1130      | Graphics I              | 3              |
| BCN 1001      | Building Construction   | 3              |
| SSI 1012      | Social Science Survey   | 3              |
| TERM TOTAL    |                         | <u>18</u>      |

## TERM II

|            |                            |           |
|------------|----------------------------|-----------|
| MTB 1322   | Technical Math II          | 3         |
| PHY 1002   | Applied Physics            | 3         |
| BCN 2230   | Concrete Construction      | 2         |
| BCN 2230L  | Concrete Construction L    | 1         |
| BCN 2708   | Construction Documents     | 3         |
| ETD 2121   | Civil Engineering Drafting | 3         |
| ENC 1313   | Technical Writing          | 3         |
| TERM TOTAL |                            | <u>18</u> |

## SOPHMORE YEAR

### TERM I

|            |                               |           |
|------------|-------------------------------|-----------|
| ETC 2523   | Drainage & Sewer Design       | 3         |
| ETD 1100   | Architectural Drafting        | 3         |
| MAN 2000   | Principles of Management      | 3         |
| ETC 2500   | Highway Design & Construction | 4         |
| ETC 1280   | Construction Survey I         | 2         |
| ETC 1280L  | Construction Survey L         | 1         |
| TERM TOTAL |                               | <u>16</u> |

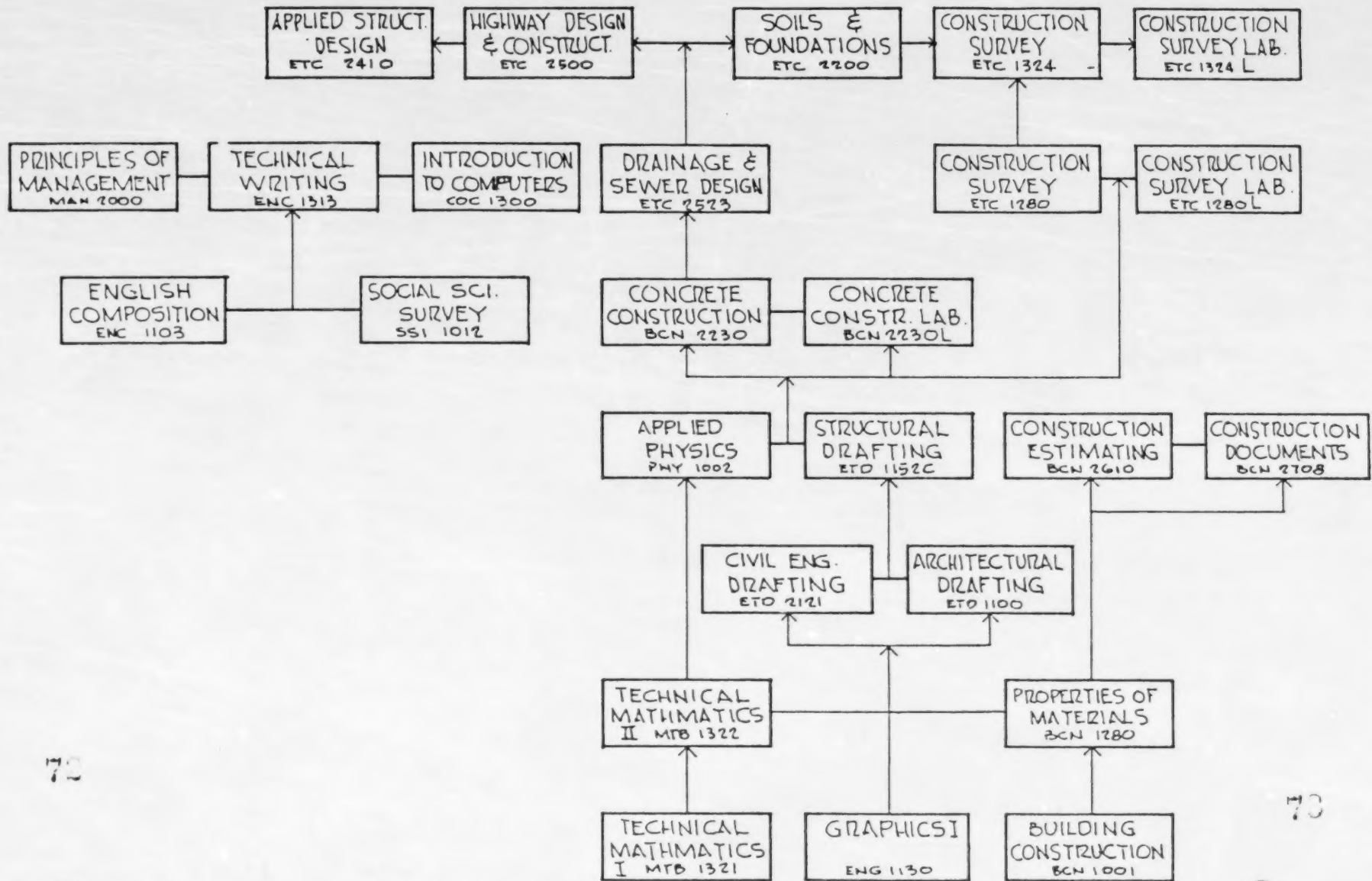
### TERM II

|            |                           |           |
|------------|---------------------------|-----------|
| ETC 1324   | Construction Survey II    | 2         |
| ETC 1324L  | Construction Survey L     | 1         |
| ETC 2220   | Soils and Foundation      | 4         |
| ETC 2410   | Applied Structural Design | 3         |
| ETD 1152C  | Structural Drafting       | 3         |
| BCN 2610   | Construction Estimating   | 3         |
| COC 1300   | Introduction to Computers | 3         |
| TERM TOTAL |                           | <u>19</u> |

TOTAL SEMESTER HOURS TO DEGREE--71

CIVIL ENGINEERING TECHNOLOGY A.S.

## ENGINEERING PREPARATION AND JOB - ENTRY LEVEL SKILLS



## MAJOR LEARNING OUTCOMES OF THE PROGRAM

The student graduate of the program, given the restricting covenants of the area and the design parameters of the specific task, can verbalize and write understandably in the special vocabulary natural to the profession of Civil Engineering and can demonstrate job-entry level acceptable skills in:

1. Elementary surveying and note taking
2. Transcribe surveying notes into topographic maps
3. Design and place and/or test concrete for specific locations
4. Do preliminary design schematics of concrete, steel and wood structures
5. Write contracts and demonstrate legal ramifications of responsibilities of the Engineer, Contractor, and owners to the project goal
6. Demonstrate via working drawings of specific projects knowledge in:
  - a. Highway Design
  - b. Structural Engineering
  - c. Architecture
  - d. Drainage and Geology
  - e. Surveying
  - f. Construction Estimating
7. Demonstrate humanistic skills inherent in the activities or business and social intercourse.

## MAJOR LEARNING OUTCOMES OF THE COURSES

### Core Courses:

Technical Mathematics I & II  
English Composition  
Social Science Survey  
Applied Physics  
Technical Writing  
Principles of Management  
Introduction to Computers

The above courses, although part of the necessary curriculum for graduation, are taught by other departments. The course outlines are audited and supervised by the Engineering & Construction Department only and are not reviewed here for that reason.

### BCN 1250 Properties of Materials --- 3 Credit Hours

Upon completion of the course the student will be able to demonstrate a practical knowledge in the use of the basic building blocks of the Construction and Engineering Sciences such as:

1. The stress factors delineating use limits in metallic and non-metallic materials organic and inorganic units, the plastics, rubber and woods
2. Limiting factors such as weight, size, susceptibility to weather or atmospheric conditions
3. Physical properties of the listed materials
4. Accessibility of the products
5. The chemical structure of the various products
6. The classifying systems currently in use.

### EGN 1130 Graphics I --- 3 Credit Hours

1. Given a drawing showing the horizontal and frontal views of a line in space, and given the necessary drafting equipment, the student will construct a view of the line which shows the line true length, with 100% accuracy.
2. Given a drawing showing the horizontal and frontal views of a line in space, and given the necessary drafting equipment, the student will determine the bearing and slope angle of the line, with 100% accuracy.



3. Given a drawing showing the horizontal and frontal views of a plane in space, and given the necessary drafting equipment, the student will determine the dihedral angle between the planes, with 100% accuracy.

BCN 1001 Building Construction --- 3 Credit Hours

1. Given a tentative building design, tables of "weights of building materials," and soil-bearing capacity for a proposed building site, the student will design footings to support the building, with 100% accuracy.
2. Given a wall section drawing for a commercial building, the student will name the building components shown in the drawing, with 80% accuracy.
3. Given drawings of various types of roof trusses, the student will name the truss types, with 80% accuracy.

BNC 2230 Concrete Construction --- 2 Credit Hours

BCN 2230L Concrete Construction Lab --- 1 Credit Hour

1. The student will explain "mixture mix ratio," with 100% accuracy.
2. Given a slump-test mold and mixed concrete, the student will demonstrate the proper method of pouring of concrete into the slump-test mold, with 100% accuracy.
3. The student will explain the importance of the "water-cement ratio" in concrete mixing, with 100% accuracy.

BCN 2708 Construction Documents --- 3 Credit Hours

The student will be able to demonstrate proficiency in the vocabulary and the contractual forms and obligations of the business and legal problems that may be encountered and which are usual to the practice of Architecture and Engineering and the Construction industry.

1. Given the drawings and specifications of a project, delineate legal responsibilities of all participants in the contract
2. Write contracts which outline responsibilities
3. Given specifications:
  - a. Outline insurance requirements and file appropriately
  - b. Use proper forms for proposals, bidding, termination, placement of liens, file claims for liability, payment itemization, and follow

- proper supervisory procedures.
4. Have practical knowledge of construction forms and procedures as pertaining to direction of referrals
  5. Differentiate governmental and commercial projects and the effects on professional and construction participants.

ETD 2121 Civil Engineering Drafting --- 3 Credit Hours

The student, given zoning and sub-division criteria, will be able to demonstrate the symbolism, vocabulary and job-entry level drafting techniques as produced in the offices of Civil Engineers.

1. Using surveyors' notebooks, convert point grades to contour topographic working drawings
2. Solve road curve data
3. Interpolate topographic contours
4. Solve and correct for instrument error
5. Draw sub-division working drawings
6. Identify map symbols correctly and their use in job-entry level acceptability on working drawings.

ETC 2121 Drainage and Sewer Design --- 3 Credit Hours

The student, given appropriate standards, will demonstrate knowledge of Geology and the hydraulics of streams and watersheds and their influence on concepts of drainage systems, culverts and surface run-off through calculations for sizing of piping.

1. Solve area watershed run-off
2. Size culvert materials on flow in storm sewers
3. Design holding (percolation) ponds for excess
4. Determination of static and live load capacities of piping.

ETD 1100 Architectural Drafting --- 3 Credit Hours

Given the appropriate code restrictions, zoning ordinances and design parameters, the student will demonstrate job-entry level drafting skills, the use of symbols and the vocabulary natural to the Architectural and Engineering professions in the preparation of detailed working drawings of a small commercial building.

1. The student will be able to create and draw the normal complement of working drawings necessary to delineate his needs to a contractor to receive acceptable bids.
2. Given design sketches the student will determine the drawings necessary to complete the project.
3. The student will design the necessary detail drawings to facilitate construction.
4. The student will use all appropriate symbols and terminology to ease bidding process.

#### ETC 2500C Highway Design and Construction

1. The student will list the advantages and disadvantages of various common types of paving materials, with 80% accuracy.
2. Given a contour map of a proposed roadway site, and given specifications for the proposed roadway, the student will determine amounts of earth cut and fill required, with 90% accuracy.
3. Given the necessary specifications for a proposed two-lane highway, and given a plat showing the site of the proposed highway, the student will determine the following, with 80% accuracy:
  - a. Advisable lane width
  - b. Advisable shoulder width
  - c. Steepest side slopes in low earth cuts
  - d. Steepest side slopes on low fills
  - e. Pavement cross slope
  - f. Desirable right-of-way width
  - g. Maximum desirable grade.

#### SUR 1100 Construction Surveying SUR 1100L Construction Surveying Lab

1. The student will explain the operation of a transit, with 100% accuracy.
2. Given a plot of ground, and a sketch showing desired boundaries, and given the necessary surveying equipment, the student will lay out the boundaries, with 100% accuracy.
3. Given a set of field notes for a survey, the student will develop and sketch a contour map for the area surveyed, with 90% accuracy.

SUR 1140 Advanced Construction Surveying  
SUR 1140L Advanced Construction Surveying Lab

1. The student will explain the operation of an electronic distance meter, with 100% accuracy.
2. The student will explain the operation of a theodolite, with 100% accuracy.
3. Given a drawing of a surveyed plot sharing boundaries, the student will determine the area of the plot, with 90% accuracy.

ETC 2220C Soils & Foundations

1. Given a soil sample and necessary laboratory equipment, the student will perform the necessary tests to determine permeability of the soil, with 90% accuracy.
2. Given a soil sample and necessary laboratory equipment, the student will perform the necessary tests to determine the specific gravity, with 90% accuracy.
3. Given a sample of cohesive soil, and necessary laboratory equipment, the student will perform the necessary tests to determine the direct shear on the cohesive soil, with 90% accuracy.

ETD 1152C Structural Drafting --- 3 Credit Hours

Given the appropriate regulatory control requirements, the codes, and the zoning ordinance restrictions, the student will make preliminary design calculations and draw concrete foundation plans and details and steel roof framing plans and details and from the detail drawings prepare shop drawings all in the style and completeness acceptable as job-entry proficiency, for a small commercial building.

1. The student will demonstrate job-entry level skills in the use of appropriate symbols of structural detailing.
2. The student will solve problems of the design of members expected of apprentice structural draft persons.
3. The student will demonstrate drafting skills that are employable in the offices of professionals in the field of Structural Engineering.

BCN 2610 Construction Estimating --- 3 Credit Hours

1. Given a set of plans and specifications for a small commercial building, the student will prepare a detailed estimate of the cost of the building, suitable for bidding purposes. Final bid price shall be within 10% of price determined by the instructor.
2. Given a theoretical situation in which a concrete beam must be designed to carry a given load over a given span, the student will determine the most economical size reinforced concrete beam to use, with 90% accuracy.
3. The student will write the definition of the following terms, with 90% accuracy:
  - (a) Tension
  - (b) Compression
  - (c) Shear
  - (d) Torsion
  - (e) Bending
  - (f) Reaction
  - (g) Centroid
  - (h) Deformation
  - (i) Modulus of Elasticity
  - (j) Moment of a Force
  - (k) Cantilever
  - (l) Moment of Inertia

TO: Advisory Committee and Employers of Drafting  
Technology Students

FROM: Fitzhugh Miller, Program Director

DATE:

RE: Currently Required Skills of Graduates

We need input periodically to modify our program to suit current needs. We know the industry and employer needs change and this survey is an effort to keep abreast of those changes. A good example of this is ink and mylar. Whereas ink and mylar are used quite a bit, we didn't feel the demand justified the expense both to the school and the student. However, if this survey shows a definite increase in inking, then that will be our justification to the budget proposal for the additional funds needed for the equipment.

Please remember our drafting program has no speciality as it would fragment our enrollment, resulting in small classes which we can't economically feasibly teach. If you would only respond to those items germane to your discipline, it would be appreciated.

In terms of both Pensacola Junior College and other school's graduates, you felt their expertise in the following areas was:



# EMPLOYER SURVEY

|                                          | GRADUATES HAVE A GOOD<br>WORKING SKILL | GRADUATES NEED MORE<br>EDUCATION IN THIS AREA | GRADUATES ARE LACKING IN<br>THIS ABILITY | IS USED IN DAY-TO-DAY<br>PRACTICE | IS SOMETIMES NECESSARY | IS NOT A NECESSARY SKILL |
|------------------------------------------|----------------------------------------|-----------------------------------------------|------------------------------------------|-----------------------------------|------------------------|--------------------------|
| Running Blue Prints                      |                                        |                                               |                                          |                                   |                        |                          |
| Correcting Check Sheets                  |                                        |                                               |                                          |                                   |                        |                          |
| Line Work with Pencil                    |                                        |                                               |                                          |                                   |                        |                          |
| Lettering with Pencil                    |                                        |                                               |                                          |                                   |                        |                          |
| Lettering with Template                  |                                        |                                               |                                          |                                   |                        |                          |
| Lettering with Lenox                     |                                        |                                               |                                          |                                   |                        |                          |
| Line Work with Ink                       |                                        |                                               |                                          |                                   |                        |                          |
| Line Work with Plastic Leads             |                                        |                                               |                                          |                                   |                        |                          |
| General Mathematics                      |                                        |                                               |                                          |                                   |                        |                          |
| Trigonometry                             |                                        |                                               |                                          |                                   |                        |                          |
| Following Oral Instructions              |                                        |                                               |                                          |                                   |                        |                          |
| Following Written Instructions           |                                        |                                               |                                          |                                   |                        |                          |
| Works without Supervision                |                                        |                                               |                                          |                                   |                        |                          |
| Independent Problem Solving              |                                        |                                               |                                          |                                   |                        |                          |
| Research                                 |                                        |                                               |                                          |                                   |                        |                          |
| Client Negotiations                      |                                        |                                               |                                          |                                   |                        |                          |
| Laws/Liabilities                         |                                        |                                               |                                          |                                   |                        |                          |
| Technical Writing (Reports, Specs, etc.) |                                        |                                               |                                          |                                   |                        |                          |
| Take-offs                                |                                        |                                               |                                          |                                   |                        |                          |
| Estimating                               |                                        |                                               |                                          |                                   |                        |                          |
| Dimensioning                             |                                        |                                               |                                          |                                   |                        |                          |
| Sectioning                               |                                        |                                               |                                          |                                   |                        |                          |
| Tolerancing                              |                                        |                                               |                                          |                                   |                        |                          |
| Metric Dimensioning                      |                                        |                                               |                                          |                                   |                        |                          |
| Curve Data                               |                                        |                                               |                                          |                                   |                        |                          |
| Latitude and Departure                   |                                        |                                               |                                          |                                   |                        |                          |
| Error of Closure                         |                                        |                                               |                                          |                                   |                        |                          |
| Property Descriptions                    |                                        |                                               |                                          |                                   |                        |                          |
| Field Note Interpretation                |                                        |                                               |                                          |                                   |                        |                          |
| Contour Lines                            |                                        |                                               |                                          |                                   |                        |                          |
| Cut and Fill                             |                                        |                                               |                                          |                                   |                        |                          |
| Road Design                              |                                        |                                               |                                          |                                   |                        |                          |
| Road Profile                             |                                        |                                               |                                          |                                   |                        |                          |
| Drainage/Run-off                         |                                        |                                               |                                          |                                   |                        |                          |
| Steel Shop Drawings                      |                                        |                                               |                                          |                                   |                        |                          |
| Connection Details                       |                                        |                                               |                                          |                                   |                        |                          |
| Framing Plans                            |                                        |                                               |                                          |                                   |                        |                          |
| Vector Analysis                          |                                        |                                               |                                          |                                   |                        |                          |
| Joint Analysis                           |                                        |                                               |                                          |                                   |                        |                          |

# EMPLOYER SURVEY

Beam Design

Column Design

Steel Tables

Concrete Placement

Re-Bar Schedules

Load Calculations

Foundation Design

Millwork Details

Truss Analysis

Deflection

Joist Span Data

HVAC Loads

Plumbing Risers

Design

Perspectives

Model Building

## REFERENCE MATERIAL

Dictionary

American Institute of Steel Construction Manual

Architectural Graphic Standards

Southern Standard Building Code

Escambia Co. Electrical Code

Pensacola Electrical Code

National Electrical Code

Florida State Energy Code

Escambia Co. Building Code

Nation Fire Protection Agency Code

Pensacola City Fire Code

Pensacola Building Ordinances

Pensacola Zoning Ordinances

Florida Hotel & Restaurant Commission Code

Escambia County Plumbing Code

Santa Rosa Island Authority Building Code

Sweet's Catalogs

Manufacturers Catalogs

GRADUATES HAVE A GOOD  
WORKING SKILL

GRADUATES NEED MORE  
EDUCATION IN THIS AREA

GRADUATES ARE LACKING IN  
THIS ABILITY

IS USED IN DAY-TO-DAY  
PRACTICE

IS SOMETIMES NECESSARY

IS NOT A NECESSARY SKILL

COMPANY'S NAME

ADDRESS

## CIVIL ENGINEERING TECHNOLOGY

### Utilization Plan

1. Program maps will be given to beginning students as a guide and as a part of their orientation.
2. Suggested revisions for the program have already been made.
3. Required performance requirements for each unit of instruction will be given to students.
4. Counselors will be made knowledgeable of the program goals, the performance expectations, and the career opportunities.
5. Articulation and information sessions will be established with high school and vocational school faculty.

REFERENCES OBTAINED FROM  
THE FLORIDA RESOURCES IN EDUCATION EXCHANGE

ED137367      TM006168

An Evaluation of a State-Wide Mastery Learning Project in  
Civil Engineering Technology: Was It Worth It? (Strasler,  
Gregg M.)

ED135959    08 E009748

Metrics for Architectural, Civil, Mechanical Drafting.  
(Cooper, Gloria S.)

ED131870      JC760619

Individually-Paced Learning in Civil Engineering Technology:  
An Approach to Master. (Sharples, D. Kent)

PROGRAM: COMPUTER SCIENCE

PROGRAM MANAGER: LISTER WAYNE HORN  
DEPT. OF BUSINESS EDUCATION & COMPUTER SCIENCE  
PENSACOLA JUNIOR COLLEGE

The Computer Science General Program is a two-year program leading to an associate of science degree. The program includes specific training in data processing and computer science, as well as general business and communications-related courses. The program prepares the student to seek employment as a computer programmer, computer operator, or data entry/control clerk.

#### Freshman Year

##### Term I

|          |                     |       |
|----------|---------------------|-------|
| GEB 1011 | Business            | 3 cr. |
| COC 1300 | Computers           | 3     |
| ENC 1103 | English Composition | 3     |
| ECO 2013 | Economics           | 3     |
| AMH 1550 | U. S. Constitution  | 1     |
| MAC 1104 | Algebra             | 3     |
| — —      | Physical Education  | (1)   |

##### Term II

|          |                       |     |
|----------|-----------------------|-----|
| SES 1100 | Beginning Typewriting | 3   |
| COP 2110 | Fortran               | 3   |
| ENC 1136 | English Composition   | 3   |
| ECO 2023 | Economics             | 3   |
| QIM 2002 | Computer Math         | 3   |
| — —      | Physical Education    | (1) |

#### Sophomore Year

##### Term I

|          |                         |     |
|----------|-------------------------|-----|
| COM 2100 | Business Communications | 3   |
| ACC 2001 | Accounting I            | 3   |
| BUL 2111 | Business Law            | 3   |
| COP 2120 | Cobol                   | 3   |
| — —      | Computer Elective       | 3   |
| — —      | Physical Education      | (1) |

##### Term II

|          |                     |     |
|----------|---------------------|-----|
| ACC 2021 | Accounting II       | 3   |
| BUL 2112 | Business Law        | 3   |
| COP 3540 | File Processing     | 3   |
| COP 2400 | Assembler           | 3   |
| CRM 2030 | Computer Operations | 3   |
| — —      | Physical Education  | (1) |

PROGRAM: COMPUTER SCIENCE

PROGRAM MANAGER: LISTER WAYNE HORN  
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The Computer Science General program is a two year program leading to an Associate in Science Degree. The program includes specific training in data processing and computer science as well as general business and communications related courses. The program prepares the student to seek employment as a computer programmer, computer operator, or data entry/control clerk.

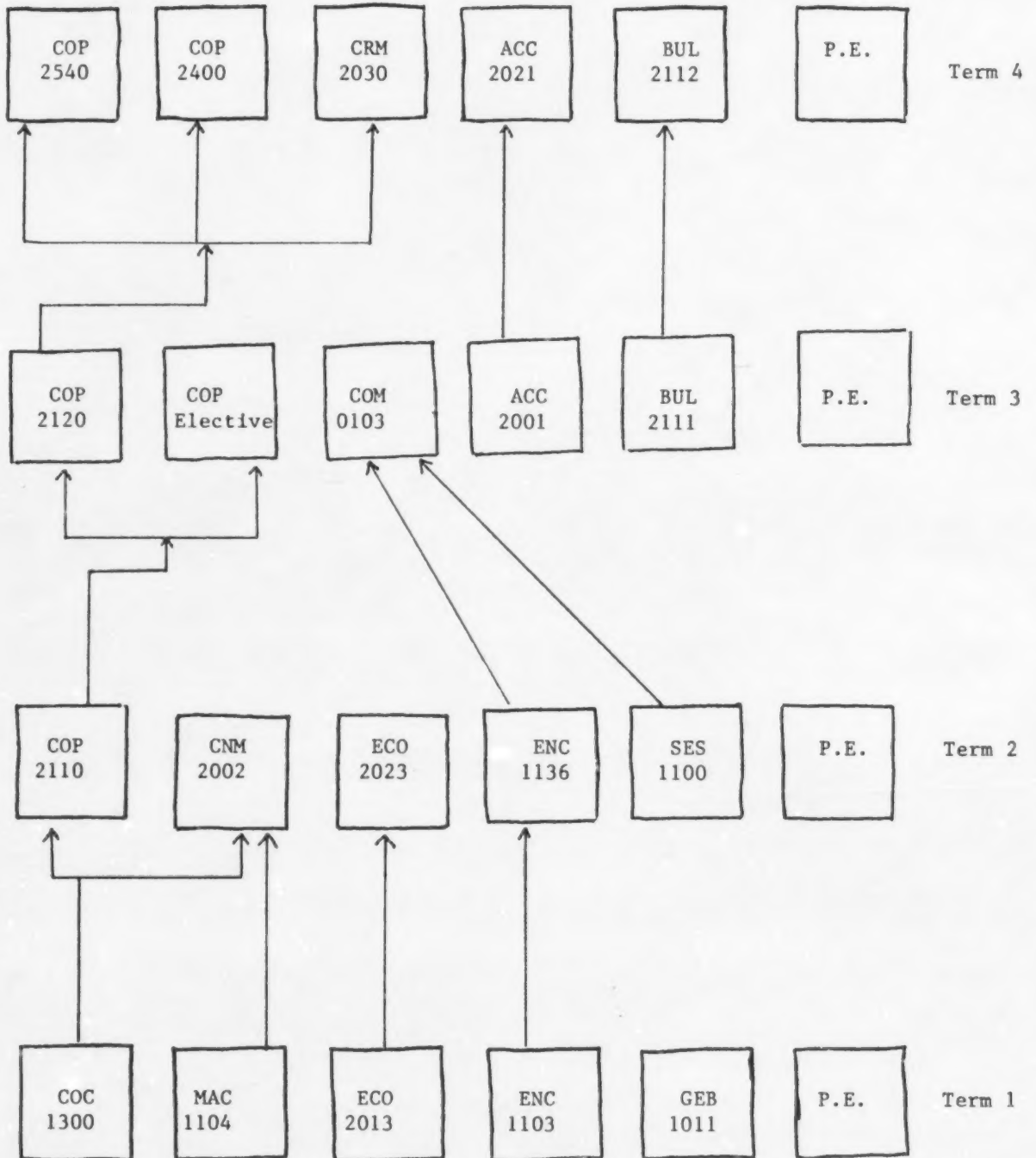


PROGRAM MAP FOR  
COMPUTER SCIENCE GENERAL (A.S)

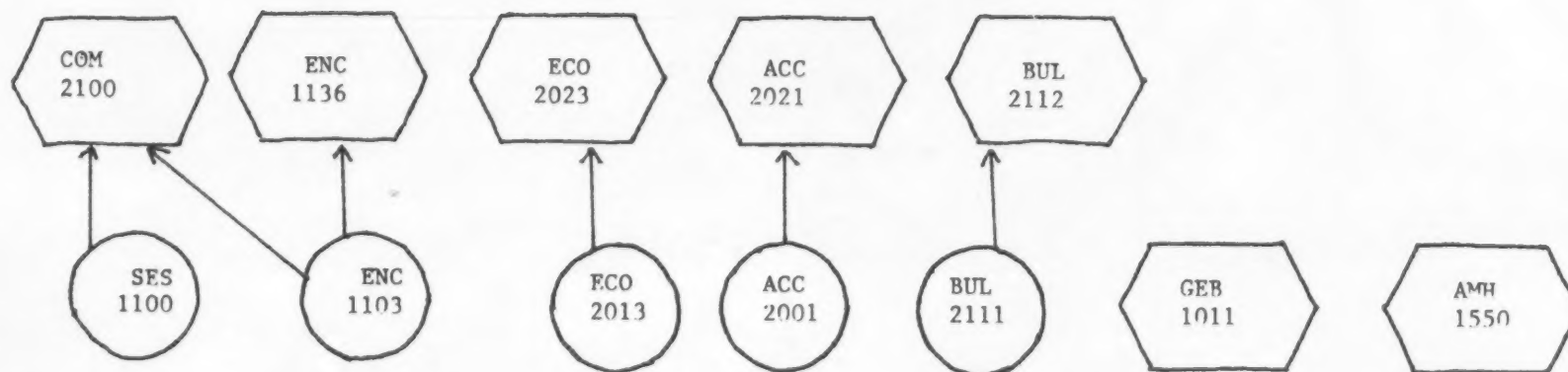
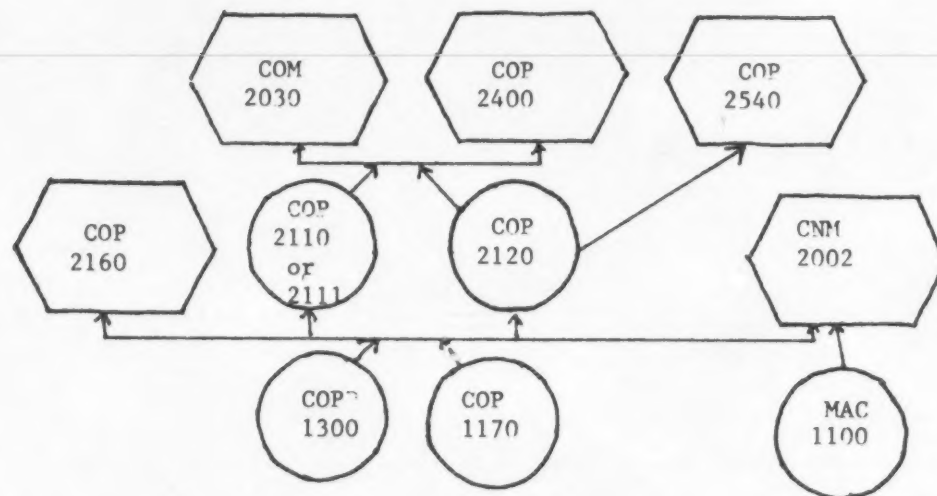
Key

COC 1300 Introduction to Computers  
COP 1170 Introduction to Programming  
COP 2110 FORTRAN  
COP 2111 Scientific FORTRAN  
COP 2120 COBOL  
COP 2160 RPG  
CNM 2002 Computer Math  
CRM 2030 Computer Operations  
COP 2400 Assembler  
COP 2540 File Processing  
MAC 1100 College Algebra  
SES 1100 Beginning Typewriting  
COM 2100 Business Communications  
ENC 1103 English Composition  
ENC 1136 English Composition  
ECO 2013 Economics I  
ECO 2023 Economics II  
ACC 2001 Accounting I  
ACC 2021 Accounting II  
BUL 2111 Business Law  
BUL 2112 Business Law  
GEB 1011 Introduction to Business  
AMH 1550 American History

Recommended Course Sequences  
Computer Science General (A.S.)



Program Map  
Computer Science General (A.S.)



## Program Objectives

The student enrolled in this program will:

1. Define terms related to computer usage and applications.
2. Write and run programs in BASIC, FORTRAN, COBOL, and RPG to solve business related problems.
3. Utilize structured programming methodology in designing and coding COBOL programs.
4. Choose appropriate file organization and access techniques to solve data processing problems.
5. Perform the duties of a computer operator under supervision of an operations supervisor.
6. Apply concepts of mathematics to solution of computer related problems including numeration, data representation, matrix manipulation, linear programming and circuit design.

## MAJOR COURSE OBJECTIVES

### COC 1300 Introduction to Computers

The student enrolled in this course will:

1. Identify terms associated with computer usage and applications.
2. Distinguish between pairs of terms related to computer usage which are often confused by the layman.
3. Classify types of computers, computing systems, and computing applications, using commonly accepted professional terminology.
4. Draw program flow charts for verbally stated problems requiring use of the following processes:
  - end of file checking
  - counting
  - accumulation
  - formula evaluation
  - subset selection
5. Write and run programs in BASIC to solve verbally stated problems requiring use of the following processes:
  - end of file checking
  - counting
  - accumulation
  - formula evaluation
  - subset selection

The programs must be logically correct and be tested with an adequate sample of data.

### COP 1170 Introduction to Programming

The student enrolled in this course will:

1. Define terms related to use of computing systems for compilation and execution of programs.
2. Write and run programs in BASIC to solve problems of a general interest and/or business orientation requiring use of:

- end of file checking
- counting
- accumulation
- formula evaluation
- data validation
- subset selection
- random processes
- functions
- subroutines
- arrays
- automatic loop control
- alphanumeric data
- graphing
- control break logic

The programs must be logically correct and tested with an adequate amount of sample data. Documentation for each program must be adequate as judged by the course instructor.

3. Utilize error messages produced by the computer and the system to correct syntax and logical error in BASIC programs.

#### COP 2110 FORTRAN

The student enrolled in this course will:

1. Define terms related to use of computing systems for compilation and execution of programs.
2. Write and run programs in FORTRAN to solve problems of a general interest and/or business orientation requiring use of:
  - end of file checking
  - counting
  - accumulation
  - formula evaluation
  - data validation
  - random processes
  - functions
  - iterative processes
  - data in integer, real, double precision, logical and complex modes
  - creation and processing sequential file
  - subroutines
  - arrays
  - automatic loop control
  - graphing
  - sorting
  - searching



The programs must be logically correct and tested with an adequate amount of sample data. Documentation for each program must be adequate as judged by the course instructor.

3. Utilize error messages produced by the compiler and the computing system to convert syntax and logical errors in BASIC programs.

#### COP 2111 Scientific FORTRAN

Objectives of this course are the same as for COP 2110 except that programming problems have a mathematical and/or scientific orientation.

#### COP 2120 COBOL

The student enrolled in this course will:

1. Define terms related to use of computing systems for compilation and execution of programs.
2. Write and run programs in COBOL using structured programming methodology to solve business related problems requiring the use of:
  - sequential file creation and processing
  - counting
  - accumulation
  - control variables
  - formula evaluation
  - data validation
  - subset selection
  - arrays
  - automatic loop control
  - control break logic
  - sorting
  - searching

The programs must be logically correct and tested with an adequate amount of sample data. Documentation must conform to generally accepted standards for structured programming.

3. Construct structure diagrams conforming to generally accepted standards for each program written.
4. Utilize error messages and error detection facilities to correct syntax and logical errors in COBOL programs.

COP 2160 RPG

The student enrolled in this course will:

1. Define terms related to use of computing systems for compilation and execution of programs.
2. Write and run programs in RPG II to solve business related problems requiring use of:
  - sequential file access
  - counting
  - accumulation
  - data editing and reproduction
  - multi-level control breaks
  - formula evaluation
  - multiple record types
  - exception output
  - arrays
  - tables look-up
  - matching records
  - indexed sequential file creation and access

The programs must be logically correct and tested with an adequate amount of sample data. Documentation for each program must be adequate as judged by the course instructor.

3. Utilize error messages produced by the compiler and the computing system to correct syntax and logical errors in RPG II program.

CNM 2002 Mathematics for Computers

The student enrolled in this course will:

1. Perform conversion of numbers from one base to another.
2. Perform arithmetic using 2's complement arithmetic.
3. Solve systems of linear equations using the graphical method, linear combinations, and Gauss elimination.
4. Find the inverse of a matrix and use it to solve systems of linear equations.
5. Use a graphical method to solve linear programming problems requiring maximization and minimization.

6. Solve linear programming problems requiring maximization using the Simplex method.
7. Use elementary Boolean algebra to simplify Boolean expression.
8. Write a Boolean expression and draw a gated circuit diagram for a circuit whose function is described in verbal terms.

#### COP 2400 Assembler

The student enrolled in this course will:

1. Define terms related to use of computing systems for compilation and execution of programs.
2. Write and run programs in Assembly language to solve problems requiring use of:
  - input and output
  - counting
  - accumulation
  - data editing
  - formula evaluation
  - arrays and indexing
  - automatic loop control
  - symbolic, indirect and absolute addressing
  - conversion of data forms
  - subroutines

The programs must be logically correct and tested with an adequate amount of sample data. Documentation for each program must be adequate as judged by the course instructor.

3. Translate an Assembly language program into machine language.
4. Utilize error messages and debugging aids to eliminate syntax and logical errors in Assembly language programs.

#### COP 2500 File Processing

The student enrolled in this course will:

1. Describe the advantages and disadvantages of sequential, indexed-sequential and direct (relative) file organization techniques.

2. Describe the relative efficiency of table access techniques including:
  - sequential search
  - binary search
  - hashing
3. Write and run programs in COBOL using structured programming methodology to solve data processing problems requiring:
  - searching
  - sorting
  - sequential file processing and updating
  - indexed sequential file creation, processing, and updating
  - direct (relative) file creation, processing, and updating

The programs must be logically correct and tested with an adequate amount of sample data. Documentation must conform to generally accepted structured programming standards.
4. Determine the most appropriate type of table organization and file organization technique to use to solve data processing problems. The choice must be justified with reference to the advantages and disadvantages of alternative methods.
5. Describe the advantages and facilities offered by data base management systems.

#### CRM 2030 Computer Operations

The student enrolled in this course will perform duties of a computer operator including:

- preventive maintenance
- scheduling of jobs
- retrieval and mounting of required media
- routing output to appropriate destinations
- diagnosis of software and hardware problems
  - using available aids
- correction of problems with data as required
- documentation of tasks performed as required

The duties must be performed to the satisfaction of the supervisor of computer operations to which the student is assigned.



# PENSACOLA JUNIOR COLLEGE

Milton Campus  
Canal St.  
Milton Fl 32570  
(904) 623 4641

Pensacola Campus  
1000 College Boulevard  
Pensacola Fl 32504  
(904) 476 5410

Warrington Campus  
5555 W. HWY 98  
Pensacola Fl 32507  
(904) 455 3246

Dear Sir:

We at Pensacola Junior College are attempting to validate our computer science program with respect to competencies usually expected of computer operators, programmers and data entry/control clerks. On the attached pages is a list of possible competencies. Please rate each one with respect to how important it is for persons employed in each of the jobs mentioned above. Please use the following scale in rating each competency.

1. Indispensable to perform this job.
2. Occasionally useful in performance of this job.
3. Not used for this job.

At the end of the form there is space for you to list other competencies which you believe are important for one or more of the job categories.

Thank you for your cooperation in this effort.

Yours truly,

Lister Wayne Horn

LWH/tl

Attachment

# EMPLOYER SURVEY

## Rating Scale

1. Indispensable
2. Occasionally useful
3. Not used

|                                                                                                  | Programmer | Operator | Data Entry |
|--------------------------------------------------------------------------------------------------|------------|----------|------------|
| 1. Read professional magazines and articles with understanding of basic concepts presented.      | _____      | _____    | _____      |
| 2. Write programs in BASIC.                                                                      | _____      | _____    | _____      |
| 3. Write programs in FORTRAN.                                                                    | _____      | _____    | _____      |
| 4. Write programs in COBOL.                                                                      | _____      | _____    | _____      |
| 5. Write programs in RPG                                                                         | _____      | _____    | _____      |
| 6. Write programs in Assembly language.                                                          | _____      | _____    | _____      |
| 7. Utilize structured programming to design and code programs.                                   | _____      | _____    | _____      |
| 8. Choose appropriate file organization and access techniques to solve data processing problems. | _____      | _____    | _____      |
| 9. Utilize error messages to correct syntax errors in programs.                                  | _____      | _____    | _____      |
| 10. Develop test data to test the logical correctness of a program.                              | _____      | _____    | _____      |
| 11. Document programs using comments or the equivalent.                                          | _____      | _____    | _____      |
| 12. Develop documentation for data entry and operations personnel.                               | _____      | _____    | _____      |
| 13. Construct structure diagrams for programs.                                                   | _____      | _____    | _____      |
| 14. Convert numbers from one base to another.                                                    | _____      | _____    | _____      |



# EMPLOYER SURVEY

## Rating Scale:

1. Indispensable
2. Occasionally useful
3. Not used

|                                                                                  | Programmer | Operator | Data Entry |
|----------------------------------------------------------------------------------|------------|----------|------------|
| 15. Perform arithmetic using complements.                                        | _____      | _____    | _____      |
| 16. Solve a system of linear equations.                                          | _____      | _____    | _____      |
| 17. Solve a linear programming problem.                                          | _____      | _____    | _____      |
| 18. Simplify Boolean expressions.                                                | _____      | _____    | _____      |
| 19. Design a gated circuit.                                                      | _____      | _____    | _____      |
| 20. Translate an assembly language instruction or program into machine language. | _____      | _____    | _____      |
| 21. Utilize appropriate table organization and search techniques.                | _____      | _____    | _____      |
| 22. Write a program to update a sequential file.                                 | _____      | _____    | _____      |
| 23. Write a program to update an indexed-sequential file.                        | _____      | _____    | _____      |
| 24. Write a program to update a direct (relative) file.                          | _____      | _____    | _____      |
| 25. Perform preventive maintenance on computing equipment,                       | _____      | _____    | _____      |
| 26. Schedule jobs to assure maximum throughput.                                  | _____      | _____    | _____      |
| 27. Retrieve and mount a tape file.                                              | _____      | _____    | _____      |
| 28. Retrieve and mount a disk pack.                                              | _____      | _____    | _____      |
| 29. Insert required forms in a printer.                                          | _____      | _____    | _____      |

Rating Scale:

1. Indispensable
2. Occasionally useful
3. Not used

|                                                                                             | Programmer | Operator | Data Entry |
|---------------------------------------------------------------------------------------------|------------|----------|------------|
| 30. Maintain an operations log                                                              | _____      | _____    | _____      |
| 31. Deliver data processing materials to specified locations.                               | _____      | _____    | _____      |
| 32. Utilize system error messages to correct logical errors in programs.                    | _____      | _____    | _____      |
| 33. Utilize system error messages to correct errors in data.                                | _____      | _____    | _____      |
| 34. Use documentation to determine action to be taken when a program terminates abnormally. | _____      | _____    | _____      |
| 35. Execute changes in existing programs to correct problems or meet new requirements.      | _____      | _____    | _____      |

Other competencies

Please list and rate.

|       |       |       |       |
|-------|-------|-------|-------|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |

## IMPLEMENTATION PLAN

1. The program map will be made available to students entering the program.
2. The objectives will be incorporated into catalog course descriptions, student course outlines, and course syllabi.
3. The program objectives will be incorporated into descriptive literature published for recruitment purposes.
4. The survey will be refined with the aid of the advisory committee and then distributed to local data processing managers. Results will be analyzed and indicated changes will be incorporated into the program.

REFERENCES OBTAINED THROUGH  
THE FLORIDA RESOURCES IN EDUCATION EXCHANGE

ED084822      EM011641  
LRC Computer Network. (Perry, Robert P.)

ED095380      CE001944  
Programming and Operations Lab. (Dade County Public  
School, Miami, Florida)

ED134250      JC770089  
Research of Curriculum Content, Data Processing Program.  
Final Report. (Stoehr, Keith)

ED148843      TM006728  
Assessing Occupational Competences--A CAEL Handbook.  
(Sharon, Amiel T.)

ED166549      CE020024  
Articulation Program Between Secondary and Postsecondary  
Institutions in Computer Technology. Final Report.  
(Daugherty, Marvin)

PROGRAM: CORRECTIONS

PROGRAM MANAGER: RICHARD C. COFFEY  
DEPARTMENT OF PUBLIC SERVICE CAREERS  
PENSACOLA JUNIOR COLLEGE, FLORIDA

The two-year Associate of Science degree Corrections program is designed to prepare the student for work in any of the primary fields in corrections, which include adult probation, adult institutions in the form of prisons and correctional institutions, adult parole to supervise persons after release from prisons, adult half-way house supervision, jail workers or counselors, juvenile institutions, and juvenile after-care workers. The program emphasizes understanding one's own biases and prejudices, how to use authority constructively, how to deal with hostility, and the social and personal factors in relationships with others, understanding the correctional field, the behavioral sciences, the legal frame work, how to use the available resources; and understanding the treatment process, resistance, and the individual and group counseling principles.

Graduates of this program, with Florida Corrections Standards counsel certification, are qualified for entry level positions with state and local correctional agencies.

## Proposed Program

### Freshman Year

| Term I                                        |       | Term II                               |       |
|-----------------------------------------------|-------|---------------------------------------|-------|
| CCJ-1300 Intro. to Corr.                      | 3 cr. | CCJ-1210 Crim. Law & Proc.            | 3 cr. |
| ENC-1103 Eng. Comp.                           | 3 cr. | CCJ-2440 Corr. Admin.                 | 3 cr. |
| MGF-1113 Gen. Math                            | 3 cr. | ENC-1136 Eng. Comp.                   | 3 cr. |
| PSY-1000 Intro. to Psy.                       | 3 cr. | SPC-1300 Speech                       | 3 cr. |
| --- ---- *Bio/Phy.Sci.                        | 3 cr. | --- ---- *Bio/Phy.Sci.                | 3 cr. |
| PEM 1130 Weight Training<br>& Phy. Condition. | 1 cr. | PEM 1140 Jogging & Phy.<br>Condition. | 1 cr. |

### Sophomore Year

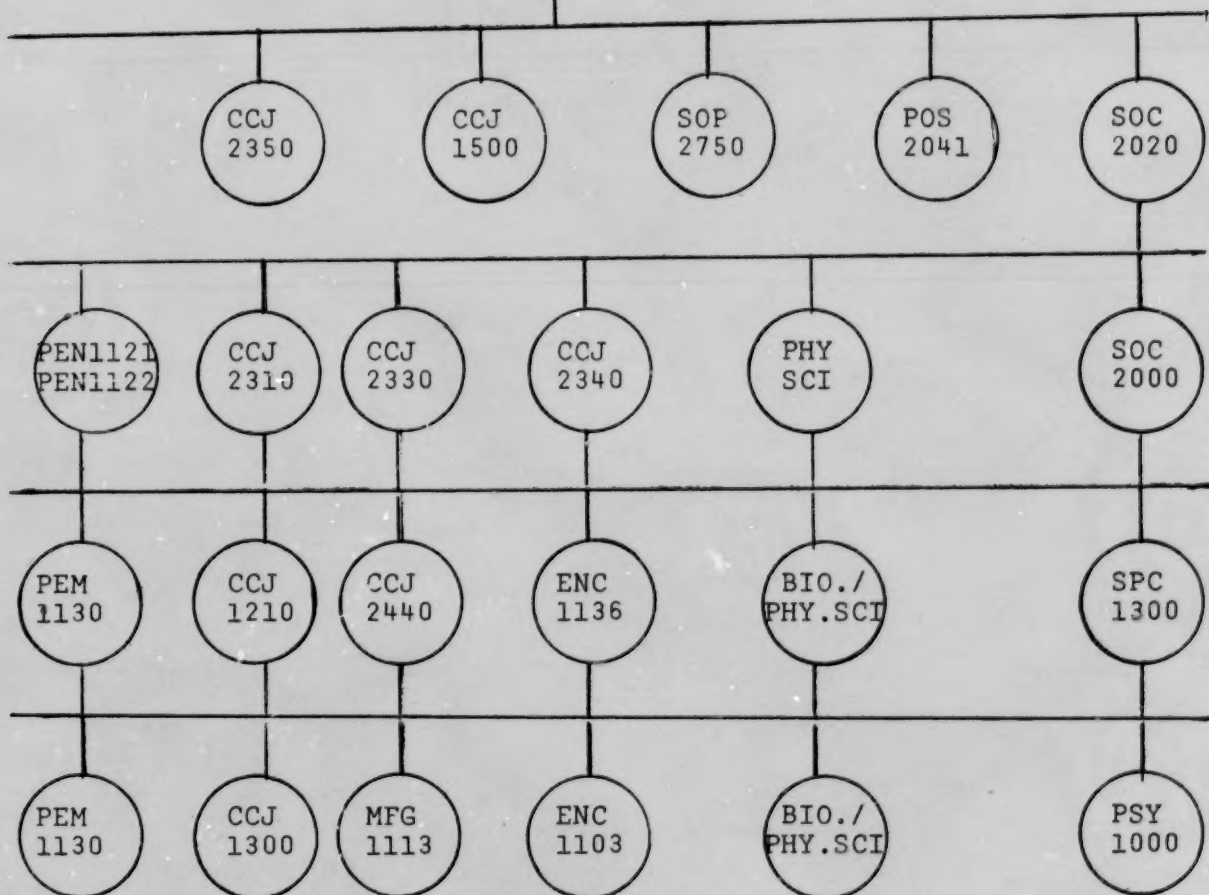
| Term I                        |       | Term II                     |       |
|-------------------------------|-------|-----------------------------|-------|
| CCJ-2310 Facility Org.        | 3 cr. | CCJ-2350 Counseling & Guid. | 3 cr. |
| CCJ-2330 Probation & Parole   | 3 cr. | CCJ-1500 Juv. Problems      | 3 cr. |
| CCJ-2340 Contemp. Corr. Prac. | 3 cr. | SOP-2750 Psychology         | 3 cr. |
| SOC-2000 Sociology            | 3 cr. | POS-2041 Nat. Govt.         | 3 cr. |
| --- ---- Phy. Sci.            | 3 cr. | SOC-2020 Social Problems    | 3 cr. |
| PEN-1121 Begn. Swim.<br>or    |       |                             |       |
| PEN 1122 Swimming             | 1 cr. |                             |       |



# Map of Proposed Program

A.S. Degree

Corrections



## Rationale for Proposed Changes

This is the way the program is currently listed in the catalog, with the exception of the Physical Education courses. The present listing is not followed, it is only a suggested program of study. If it were required, the student and the counselor would have a better idea of where the student was at any given time.

The general education requirements have been specifically selected to meet the needs of the corrections major. The majority of the general education courses are required the first two terms, especially the English and Math courses, to insure that the corrections student will be prepared to focus on his/her chosen field, and to insure that the instructors will be receiving students who are capable of performing college level work.

### Major Learning Outcomes for the Program

The graduate of the corrections degree program will be able to understand and withstand provocative behavior without becoming punitive.

The graduate of the corrections degree program will accept an inmate or person on the case load without personal involvement, with neither punitive nor sentimental views.

The graduate of the corrections degree program will be sensitive to pathological behavior as compared with normal random behavior, sufficient to permit intelligent referral to professional staff.

The graduate of the corrections degree program will assess the strength of an individual and determine what the treatment team has to build on in the treatment of an offender.

The graduate of the corrections degree program will be able to constructively interpret administrative decisions, actions, and procedures to inmates, probationers, and parolees.

The graduate of the corrections degree program will have the knowledge to interpret the system of justice, including laws of arrest, judicial procedure - and the total correctional process of probation prison, and parole, together with knowledge of revocation hearing procedure and pardon procedure.

The graduate of the corrections degree program will have a working knowledge of the civil and constitutional rights of prisoners, whatever their status, and the incorporation of that knowledge into the supervisory process.

## MAJOR LEARNING OUTCOMES OF THE COURSES

### CCJ-1300 - Introduction to Corrections

#### Learning Outcomes:

1. The introduction to corrections student will be able to differentiate between Corrections and Criminology and give a complete and comprehensive definition of each.
2. The introduction to corrections student will be able to relate the significant events in Florida history that have resulted in our present Florida Correctional System.
3. The introduction to corrections student will be able to define and describe the role of the police, courts, and corrections; their relationship to the system and to each other.

### CCJ-2440 - Correctional Administration

#### Learning Outcomes:

1. The correctional administration student will be able to state and explain McGregor's X-Y Theories of Management.
2. The correctional administration student will be able to define the concept of "The Peter Principle" and relate this principle to a correctional setting.
3. The correctional administration student will be able to construct and explain in detail an organizational chart for a medium to large correctional institution.

### CCJ-2310 - Facility Organization and Operations

#### Learning Outcomes:

1. The facility organization and operations student will be able to explain in detail the two basic correctional philosophies -- rehabilitation and punishment.
2. The facility organization and operations student will be able to chart the history and evolution of the prison system and to delineate the various types of facility organizations and administrative structures in existence today in the U.S.
3. The facility organization and operations student will be able to identify and describe the type of character-behavior disorders which one is likely to find in the inmate population.

## CCJ-2330 - Probation and Parole

### Learning Outcomes:

1. The probation and parole student will be able to differentiate between and explain the terms, probation, pardon, and parole.
2. The probation and parole student will be able to describe the major components of probation and parole.
3. The probation and parole student will be able to chart the development of probation and parole from their early English beginnings to present day.

## CCJ-2340 - Contemporary Correctional Practices

### Learning Outcomes:

1. The contemporary correctional practices student will be able to define and differentiate between Crime, Law, and Justice in American society.
2. The contemporary correctional practices student will be able to identify and explain the critical issues in corrections to include, but not limited to: Rehabilitation, Effectiveness, Death Sentences, and Minorities in the correction process.
3. The contemporary correctional practices student will be able to identify and describe all of the available alternatives to incarceration.

## CCJ-2350 - Counseling and Guidance

### Learning Outcomes:

1. The counseling and guidance student will be able to chart the evolution of counseling and guidance and be able to explain why counseling is an American product.
2. The counseling and guidance student will be able to explain at what level in the correctional process and the criminal justice system that counseling and guidance have a function and what roles they can play.
3. The counseling and guidance student will be able to state the major con (?) of the following theraputic models used in counseling: Reality Therapy, Behavior Modification Gestalt Therapy, Transactional Analysis, Group Therapy, and Guided Group Interaction.

## CCJ-1500 - Juvenile Problems

### Learning Outcomes:

1. The juvenile problem student will be able to state and define the major theories on juvenile delinquency.

2. The juvenile problems student will be able to describe the major delinquency prevention programs based on the theory of causation.
3. The juvenile problems student will be able to chart the juvenile justice system.

CCJ-1210 - Criminal Law and Procedure

Learning Outcomes:

1. The criminal law and procedure student will be able to demonstrate the fundamentals of legal research, authority, citation, and the briefing of cases.
2. The criminal law and procedure student will be able to identify the principle laws of criminal procedure, particularly those of importance at the operational level in law enforcement.
3. The criminal law and procedure student will be able to describe the rules of evidence and the rules of admissibility.

### Rationale for Proposed Change

The need for improved correctional programs has never been more apparent than it is today. The rising crime rate, the increase of violence, and the increasingly disorderly social process have generated public and political concern.

The community and Junior College can provide basic education to the field of Corrections. Education of personnel is the most effective way of improving correctional services. When 75 to 80 per cent of the budget of a correctional institution or agency goes into its personnel then improvement of personnel must be the most appropriate approach to improvement of the program. The majority of personnel currently engaged in corrections are at the educational levels where they can be served effectively by the community and Junior College.



# EMPLOYER SURVEY FORM

## Evaluation

Below is a recommended format for evaluating the graduate of the A.S. degree program on corrections. The evaluation would be made by the graduate's immediate supervisor. Number one (1) is the lowest rating and number five (5) the highest.

|                                                                                                                                            | <u>Poor</u> | <u>Satisfactory</u> |   |   | <u>Superior</u> |
|--------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------|---|---|-----------------|
| 1. Demonstrates the ability to recognize and analyze the habits, attitudes and behavior of inmates.                                        | 1           | 2                   | 3 | 4 | 5               |
| 2. Demonstrates a knowledge of social problems in the institutional situation.                                                             | 1           | 2                   | 3 | 4 | 5               |
| 3. Demonstrates a knowledge of the basic theories and techniques of social work in relation to the treatment of the offender.              | 1           | 2                   | 3 | 4 | 5               |
| 4. Demonstrates a knowledge of the role of counseling in dealing with prison inmates.                                                      | 1           | 2                   | 3 | 4 | 5               |
| 5. Demonstrates the ability to deal effectively with persons of anti-social attitudes to win their confidence and influence their actions. | 1           | 2                   | 3 | 4 | 5               |
| 6. Demonstrates the ability to apply modern methods in the development of treatment programs and plans for prison inmates.                 | 1           | 2                   | 3 | 4 | 5               |
| 7. Demonstrates a knowledge of the civil and constitutional rights of prisoners.                                                           | 1           | 2                   | 3 | 4 | 5               |
| 8. Demonstrates the ability to apply the laws of arrest.                                                                                   | 1           | 2                   | 3 | 4 | 5               |
| 9. Demonstrates a knowledge of revocation hearing procedure and pardon procedure.                                                          | 1           | 2                   | 3 | 4 | 5               |

|                                                                                               | <u>Poor</u> | <u>Satisfactory</u> |   |   | <u>Superior</u> |
|-----------------------------------------------------------------------------------------------|-------------|---------------------|---|---|-----------------|
| 10. Demonstrates the ability to interpret and execute administrative decisions.               | 1           | 2                   | 3 | 4 | 5               |
| 11. Demonstrates the ability to use tact to avoid creating or aggravating problem situations. | 1           | 2                   | 3 | 4 | 5               |
| 12. Demonstrates a knowledge of on-the-job counseling techniques.                             | 1           | 2                   | 3 | 4 | 5               |
| 13. Demonstrates the ability to supervise inmates without becoming punitive.                  | 1           | 2                   | 3 | 4 | 5               |
| 14. Demonstrates the ability to interpret and properly utilize the Florida Criminal Statutes. | 1           | 2                   | 3 | 4 | 5               |

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### Utilization Plan

The implementation of this proposal will allow for more consistent counseling to the student, and provide the student with a better understanding of course sequence and objectives.

The evaluation format will be used by each employing agency to evaluate the graduate of the corrections program for the purpose of providing feedback for future program improvements.

PROGRAM: Criminal Justice: Law Enforcement Tract

PROGRAM MANAGER: A. J. Winfield  
Department of Public Service Careers  
Pensacola Junior College

Law Enforcement is a two-year Associate of Science program. The program is designed to prepare the student for entry into the Law Enforcement profession, and helps to increase the competency of those who are presently employed in the field of Law Enforcement. Those who complete the degree may also continue the sequence with a bachelor's degree objective.

The program requires that the student complete 33 units of general education, 15 units of Criminal Justice core courses, and the remaining 12 units from the elective courses within the Law Enforcement tract.

PROPOSED PROGRAM

Freshman Year

Term I

|                                                     |          |
|-----------------------------------------------------|----------|
| ENC 1103 English Composition                        | 3 units  |
| PSY 1000 General Psychology                         | 3 units  |
| MGF 1113 General Math                               | 3 units  |
| POS 2041 National Government                        | 3 units  |
| --- ---- Biological Science                         | 3 units  |
| PEM 1130 Weight Training &<br>Physical Conditioning | 1 unit   |
| <hr/>                                               |          |
|                                                     | 16 units |

Term II

|                                             |          |
|---------------------------------------------|----------|
| ENC 1136 English Composition                | 3 units  |
| SOP 2750 Psychology for Criminal<br>Justice | 3 units  |
| SOC 2020 Social Problems                    | 3 units  |
| CCJ 1000 Intro. to Criminal<br>Justice      | 3 units  |
| --- ---- Humanities                         | 3 units  |
| PEM 1140 Jogging & Physical<br>Conditioning | 1 unit   |
| <hr/>                                       |          |
|                                             | 16 units |

Sophomore Year

Term I

|                                           |          |
|-------------------------------------------|----------|
| CCJ 1010 Criminal Law                     | 3 units  |
| CCJ 1020 Criminal Evidence &<br>Procedure | 3 units  |
| CCJ 1030 Juvenile Problems                | 3 units  |
| CCJ 1040 Police Arsenal &<br>Weapons      | 3 units  |
| POS 2112 State & Local Govt.              | 3 units  |
| PEN 1121 Beginning Swimming<br>or         | 1 unit   |
| PEN 1122 Swimming                         |          |
| <hr/>                                     |          |
|                                           | 16 units |

Term II

|                                                          |         |
|----------------------------------------------------------|---------|
| Choose 12 units from the following list<br>of electives: |         |
| CCJ 1050 Intro. to Criminalistics                        | 3 units |
| CCJ 1060 Police Operations                               | 3 units |
| CCJ 1070 Police Administration<br>& Organization         | 3 units |
| CCJ 1080 Criminal Investigation                          | 3 units |
| CCJ 1090 Traffic Administration                          | 3 units |
| CCJ 2000 Prevention & Control<br>of Crime                | 3 units |
| CCJ 2010 Narcotics & Dangerous<br>Drugs                  | 3 units |

■





### RATIONALE FOR PROPOSED CHANGES

This program is designed to provide five (5) core courses in the Criminal Justice field. Upon completion of the required general education course and the five (5) core courses, the student may choose to specialize in one of three specialized tracts: (1) Law Enforcement (detailed in this project), (2) Corrections, or (3) Private Security. The general education requirements have been specifically selected to meet the needs of the various professions within the Criminal Justice field. The majority of general education courses are required the first two terms. Specifically, the English, Math, and Behavioral Sciences should insure that the Criminal Justice student will be better prepared to focus his attention on studies of his chosen field, and should insure that instructors will be receiving students who are capable of performing college level work.

## MAJOR LEARNING OUTCOMES FOR PROGRAM

The student will:

1. Define the function, purpose, and need of professional Law Enforcement personnel in today's society.
2. Demonstrate ability to function effectively in the performance of crime control function through a greater ability to apply systems and technology in the field.
3. Demonstrate effectiveness to perform "order maintenance" function through more balanced use of social techniques and Law Enforcement techniques in the field.
4. Demonstrate ability to properly exercise use of police discretionary power in the field.

### MAJOR LEARNING OUTCOMES FOR CRIMINAL JUSTICE COURSES LAW ENFORCEMENT TRACT

#### CCJ 1000 - Introduction to Criminal Justice

The student will:

1. Define and describe the role of the police, the courts, and corrections, their relationship to the system and to each other.
2. Describe the function of law and the concept of crime.
3. Describe the philosophy and procedure of the American Criminal Justice System.

#### CCJ 1010 - Criminal Law

1. Define the following crimes and the degrees of each, if applicable, and include the elements necessary to prove each:
  - a. murder
  - b. robbery
  - c. rape
  - d. burglary
  - e. kidnapping
  - f. battery
  - g. arson
  - h. larceny
2. Describe the historical and philosophical foundation for state and federal criminal law.
3. Distinguish between malum in se and mala prohibita, mens rea and actus reus, and felony, misdemeanor, and infraction.

4. Describe the civil and criminal liability involved in the use of force by a police officer in the performance of his duties.

#### CCJ 1020 - Criminal Evidence and Procedure

1. Demonstrate the fundamentals of legal research, authority, citation, and the briefing of cases.
2. Identify the principal laws of criminal procedure, particularly those of import at the operational level in Law Enforcement.
3. Describe the rules of evidence and admissibility.

#### CCJ 1040 - Police Arsenal and Weapons

1. Identify twenty (20) parts and their functions of a Smith and Wesson or Colt .38 or .357 caliber service revolver.
2. Describe the civil and criminal liability in the use of firearms.
3. Demonstrate his/her ability to shoot a 225 out of a possible 300 on the following course:
  - a. Police Pistol Course
  - b. Florida Police Standards Course
  - c. Combat Course
  - d. Tactical Revolver Course

#### CCJ 1030 - Juvenile Problems

1. Define the major theories of juvenile delinquency.
2. Describe the major delinquency prevention programs based on the theories of causation.
3. Describe the Juvenile Justice System.

#### CCJ 1050 - Introduction to Criminalistics

1. Describe the scientific techniques of gathering, marking, and storing the following types of evidence:
  - a. latent fingerprints
  - b. impressions
  - c. stains and traces
  - d. hairs and fibers
  - e. firearms
  - f. documents

### CCJ 1060 - Police Operations

1. Define the objectives of police patrol.
2. Describe operational techniques used in answering conventional and non-conventional calls.
3. Identify specialized patrol tactics.

### CCJ 1070 - Police Administration and Organization

1. Describe various theories of management and organization.
2. Describe how the different principles of management and organization relate to the administration of criminal justice agencies.
3. Evaluate the role of the police as related to the community, politics, and other agencies of the criminal justice system.

### CCJ 1080 - Criminal Investigation

1. Describe the stages of a criminal investigation and the types of information essential to each.
2. Describe the essential qualities and content of a criminal case report.
3. Identify proper procedure for the collection and preservation of evidence.

### CCJ 1090 - Traffic Administration

1. Define the objective of traffic enforcement.
2. Describe the elements of traffic laws pertaining to the inspection, licensing, registration, and operation of motor vehicles.
3. Describe the procedure of investigating a traffic accident.

### CCJ 2000 - Prevention and Control of Crime

1. Describe the principles of assessing and reducing crime risk.
2. Compare alternative habits and hardware for physical security.
3. Describe the available electronic security hardware and its application.

### CCJ 2010 - Narcotics and Dangerous Drugs

1. Distinguish between the different schedules for narcotics and drug classification.
2. Identify the major abused narcotics and drugs and their symptoms.
3. Describe methods of specialized drug enforcement tactics.

## FIELD TRAINING AND EVALUATION PROGRAM

### Standardized Evaluation Guidelines

The following "1", "4", and "7" scale value definitions represent a synthesis of the definitions submitted by seventy present and past Field Training Officers who have, collectively, trained approximately two hundred recruits. The task of evaluating and rating a recruit officer's performance should be based on these definitions. As guidelines, these definitions serve as a means of program standardization and continuity.

#### APPEARANCE

##### (1) GENERAL APPEARANCE:

- #1. Unacceptable: Overweight - dirty shoes and uniform, long unkempt hair, dirty weapon, offensive body odor.
- #4. Acceptable: Neat, clean uniform and weapon - well groomed hair, shined shoes.
- #7. Superior: Tailored clean uniform - spit-shined shoes and leather - command bearing.

#### ATTITUDE

##### (2) ACCEPTANCE OF FEEDBACK

- #1. Unacceptable: Rationalizing - argumentative - refuses to make corrections - considers criticism as negative.
- #4. Acceptable: Accepts criticism in positive manner and applies it to further learning processes.
- #7. Superior: Solicits criticism in order to improve performance - never argues or blames others.

##### (3) ATTITUDE TOWARD POLICE WORK

- #1. Unacceptable: Takes police work as only a job; uses job for ego trip; abuses authority (badge heavy); no dedication.
- #4. Acceptable: Expresses active interest toward the job.
- #7. Superior: Utilizes off duty time to further professional knowledge, maintains high ideals toward professional responsibilities.



## KNOWLEDGE

### (4) KNOWLEDGE OF DEPARTMENT POLICIES AND PROCEDURES

- #1. Unacceptable: Has no knowledge of department policies and procedures and makes no attempt to learn.
- #4. Acceptable: Familiar with most commonly applied departmental policies and procedures.
- #7. Superior: Exceptional working knowledge of departmental policies and procedures.

### (5) KNOWLEDGE OF FLORIDA STATUTES RELATIVE TO CRIMINAL LAW

- #1. Unacceptable: Doesn't know elements of basic sections, not able to learn, no attempt at improvement.
- #4. Acceptable: Working knowledge of commonly used sections - relates elements to observed criminal activity.
- #7. Superior: Outstanding knowledge of Penal Code and ability to apply it to both normal and unusual criminal activity.

### (6) KNOWLEDGE OF THE FLORIDA STATUTES RELATING TO MOTOR VEHICLE OPERATION

- #1. Unacceptable: Doesn't know elements of basic sections, not able to learn, no attempt at improvement.
- #4. Acceptable: Working knowledge of commonly used sections - relates elements to observed traffic related activity.
- #7. Superior: Outstanding knowledge of commonly used sections, relates it and applies it to both normal and unusual traffic related situations.

### (7) KNOWLEDGE REFLECTED IN VERBAL OR WRITTEN TESTS

- #1. Unacceptable: Consistently scores below average (70%) on written test. Consistently unable to answer FTO's questions.
- #4. Acceptable: Scores 70-90% on tests. Answers most of all FTO's questions.
- #7. Superior: Scores above 90% on tests, answers all of FTO's questions.



(8) KNOWLEDGE REFLECTED IN FIELD-PERFORMANCE TESTS

- #1. Unacceptable: After receiving training, unable to apply training to practical situations.
- #4. Acceptable: After the FTO instructs in proper procedure, recruit is able to apply instruction usually.
- #7. Superior: After training, recruit makes no mistakes.

PERFORMANCE

(9) DRIVING SKILL: NORMAL CONDITIONS

- #1. Unacceptable: Continually violates Vehicle Code (red light, stop signs) - involved in chargeable accidents, lacks dexterity and coordination during vehicle operation.
- #4. Acceptable: Ability to maintain control of vehicle while being alert to activity outside of vehicle. Practices good defensive driving techniques.
- #7. Superior: Sets good example of lawful, courteous driving while exhibiting good manipulative skill required of patrolman (i.e., operate radio - utilize hot sheet).

(10) DRIVING SKILL: MODERATE AND STRESS CONDITIONS

- #1. Unacceptable: Involved in accident(s). Unnecessary Code 3. Overuses red lights and siren. Excessive and unnecessary speed. Fails to slow for intersections and loses control on corners.
- #4. Acceptable: Maintains control of vehicle. Evaluates driving situations and reacts properly. (i.e., proper speed for conditions).
- #7. Superior: High degree of reflex ability and competence in driving skills.

(11) USE OF RD MAPS: ORIENTATION SKILL/RESPONSE TIME TO CALLS

- #1. Unacceptable: Unaware of his location while on patrol. Does not understand proper use of RD maps. Unable to relate his location to his destination. Not familiar with the district and beat structure.
- #4. Acceptable: Reasonable knowledge of his location in most situations. Can quickly use RD's to find streets and then apply the RD map to get himself there.

- #7. Superior: Retains prior RD information and is able to get to destination by shortest route.

(12) ROUTINE FORMS: ACCURACY/COMPLETENESS

- #1. Unacceptable: Unable to determine proper form for given situations, forms incomplete.
- #4. Acceptable: Knows most standard forms and understands format. Completes forms with reasonable accuracy and thoroughness.
- #7. Superior: Consistently and rapidly completes detailed forms with no assistance. High degree of accuracy.

(13) REPORT WRITING: ORGANIZATION/DETAILS

- #1. Unacceptable: Totally incapable of organizing events into written form.
- #4. Acceptable: Converts field situations into a logical sequence of thought to include all elements of the situation.
- #7. Superior: A complete and detailed account of what occurred from beginning to end, written and organized so as to assist any reader in comprehending the occurrence.

(14) REPORT WRITING: LEVEL OF USAGE/GRAMMAR/SPELLING/NEATNESS

- #1. Unacceptable: Illegible, misspelled words, incomplete sentence structure.
- #4. Acceptable: Level of usage of grammar, spelling and neatness are satisfactory in that errors in this area are rare and do not impair understanding.
- #7. Superior: Very neat and legible, no spelling mistakes and excellent grammar.

(15) REPORT WRITING: APPROPRIATE TIME USED?

- #1. Unacceptable: Requires 2-3 hours to complete basic simple reports.
- #4. Acceptable: Completes simple basic reports in 30 minutes.
- #7. Superior: Completes simple basic reports in no more time than that of a skilled veteran officer.  
(Articulate this depending on the type of report, what you consider normal time to complete.)

(16) FIELD PERFORMANCE (NON-STRESS CONDITIONS)

- #1. Unacceptable: Seemingly confused and disoriented as to what action should be taken in a given situation.
- #4. Acceptable: Able to assess situation and take proper action.
- #7. Superior: Requires no assistance and always takes proper course of action.

(17) FIELD PERFORMANCE (STRESS CONDITIONS)

- #1. Unacceptable: Becomes emotional and panic stricken, unable to function, loses temper.
- #4. Acceptable: Exhibits calm and controlled attitude, does not allow situation to further deteriorate.
- #7. Superior: Maintains control and brings order under any circumstances without assistance.

(18) SELF-INITIATED FIELD ACTIVITY

- #1. Unacceptable: Does not see, or avoids activity. Does not follow up on situations, rationalizes suspicious circumstances.
- #4. Acceptable: Recognizes and identifies suspected criminal activity, makes cases from routine activity.
- #7. Superior: Catalogs, maintains and uses information given at briefings and from watch bulletins for reasonable cause to stop vehicles and persons, and makes subsequent good quality arrests.

(19) OTHER SAFETY - GENERAL

- #1. Unacceptable: Frequently fails to exercise officer safety, i.e.
  - a) Exposes weapons to suspect (baton, mace, handgun, etc.)
  - b) Fails to keep gun hand free during enforcement situations.
  - c) Stands directly in front of violator's car door
  - d) Fails to control suspect's movements
  - e) Does not maintain sight of violator while writing citation
  - f) Failure to use illumination when necessary
  - g) Fails to advise radio when leaving a vehicle
  - h) Fails to maintain good physical condition
  - i) Fails to utilize or maintain personal safety equipment properly
  - j) Does not foresee potentially dangerous situations

- k) Points gun at other officers
- l) Stands too close to vehicular traffic
- m) Stands in front of door when knocking
- n) Fails to have weapon ready when appropriate
- o) Fails to cover other officers
- p) Fails to search police vehicle prior to duty or after transporting. Fails to check equipment.

#4. Acceptable: Understands principles of officer safety and generally applies those principles.

#7. Superior: Always keeps in a safe position. Always watchful on his approach to a call and able to do the same for his partner. Does not become paranoid or overconfident.

#### (20) OFFICER SAFETY: SUSPICIOUS PERSONS AND PRISONERS

#1. Unacceptable: Frequently violates officer safety standards as detailed in Number 19 (#1) above and in addition, fails to "pat search" or confronts suspicious persons while seated in police vehicle, fails to handcuff potentially hazardous prisoners or felons, and fails to thoroughly search prisoners or their vehicles. Fails to maintain position of advantage with prisoners to prevent attack or escape.

#4. Acceptable: Generally displays awareness of potential danger from suspicious persons and prisoners, maintains position of advantage.

#7. Superior: Always maintains position of advantage and is alert to changing conditions.

#### (21) CONTROL OF CONFLICT: VOICE COMMAND

#1. Unacceptable: Improper voice inflection, i.e., too soft, too loud, confused voice command or indecisive, poor officer bearing.

#4. Acceptable: Speaks with authority in a calm clear voice.

#7. Superior: Always gives appearance of complete command through voice tone and bearing.

#### (22) CONTROL OF CONFLICT: PHYSICAL SKILL

#1. Unacceptable: Cowardly, physically weak or uses too little or too much force for given situation. Unable to use proper restraints.

#4. Acceptable: Maintains control without excessive force, good physical condition.



- #7. Superior: Excellent knowledge and ability to use restraining holds. Always prepared to use necessary force and above average physical conditioning.
- (23) USE OF COMMON SENSE AND GOOD JUDGMENT
- #1. Unacceptable: Acts without thought or indecisive. Naive.
- #4. Acceptable: Able to reason out a problem and relate it to what he is taught. Good perception and ability to make his own decisions.
- #7. Superior: Excellent perception in foreseeing problems and arriving at advance solutions.
- (24) RADIO: APPROPRIATE USE OF 10-CODE
- #1. Unacceptable: Misinterprets 10-Code definitions or fails to use it in accordance with set policy, fails or refuses to improve.
- #4. Acceptable: Has good working knowledge of majority of 10-Code definitions.
- #7. Superior: Uses 10-Code with ease in all receiving and sending situations.
- (25) RADIO: LISTENS AND COMPREHENDS TRANSMISSION
- #1. Unacceptable: Repeatedly misses his call sign and is unaware of traffic on adjoining beats. Frequently has to ask radio to repeat transmission or does not comprehend message.
- #4. Acceptable: Copies most radio transmissions directed to him and is generally aware of adjoining beat traffic.
- #7. Superior: Always comprehends radio transmissions and quickly makes a written record, always aware of, and quickly reacts to traffic on adjoining beats.
- (26) RADIO: ARTICULATION OF TRANSMISSIONS
- #1. Unacceptable: Does not preplan before transmitting message. Under or overmodulation resulting in operator constantly asking for repeat.
- #4. Acceptable: Uses proper procedure with short concise transmissions.

- #7. Superior: Always uses proper procedure with clear calm voice even under stress situations.

#### RELATIONSHIPS

##### (27) WITH CITIZENS: GENERAL

- #1. Unacceptable: Abrupt, belligerent, and overbearing, introverted and uncommunicative.
- #4. Acceptable: Courteous, friendly and empathetic, communicates in a professional and unbiased manner.
- #7. Superior: Establishes rapport and is always objective. Always appears to be at ease in any person-to-person situation.

##### (28) WITH MINORITIES

- #1. Unacceptable: Evident hostility or sympathy toward minorities because of prejudice, bias or pity.
- #4. Acceptable: Appears to be at ease and does not feel threatened by presence of minorities.
- #7. Superior: Seems to understand cultural differences and effects on relations and reacts properly.

##### (29) WITH FIELD TRAINING OFFICERS/SUPERVISORS

- #1. Unacceptable: Constant rationalization of mistakes to F.T.O. Resists any teaching technique or argues with F.T.O. Patronizes F.T.O. or is sarcastic.
- #4. Acceptable: Asks pertinent questions and is objective in his desire to learn.
- #7. Superior: Understands and maintains excellent student-teacher relationship.



## SCALE VALUE APPLICATION

Perhaps the most difficult task facing the rater is the application of the numerical value that represents the behavior he is evaluating. The rater's dilemma usually involves his rating philosophy vs another's and the question of who is right. The following explanations should clarify the issue and ease the concern of the rater and the ratee.

The first principle of value application that must be accepted by all is that each of us has different perceptions on nearly everything in the life experience. While a standardization of rating is an acute necessity, an attempt to standardize perceptions is doomed to failure at the start. By example: FTO "A", based on a prior negative experience of his own, might see a recruit's exposure of his weapon to a suspect as worth a "1" rating. FTO "B", on the other hand, might see the same recruit behavior as "3" level performance. Should we (or the recruit) really be concerned? Our answer is "NO"... As long as both officers see the performance as "unacceptable" under Guideline 19a (Officer Safety-General). A lack of standardization ensues when "A" sees the behavior as Unacceptable (Scale Values 1,2, or 3) and "B" sees the same behavior as Acceptable (Scale Values 4 through 7). Again, we have no difficulty accepting differences in officers' perceptions unless these perception differences vary from the Unacceptable values to values reflecting Acceptable performance.

The second principle that may come into play in the above example or any other performance of the job task items has to do with the value assigned as a result of a recruit not responding to training. A trainee who performs at a less than acceptable level might be assigned a "2" or "3" for that task. The FTO is under an obligation to remediate that mistake and assess the recruit's performance when next he has an opportunity to perform the task. If the FTO retrained and the recruit once more fails to perform, a reduction in the scale values might be appropriate.

POLICE DEPARTMENT  
Daily Observation Report No. \_\_\_\_\_

Recruit: \_\_\_\_\_ F.T.O. \_\_\_\_\_ Date: \_\_\_\_\_

Rating Instructions:

Rate observed behavior with reference to the scale below. Specific comments are required for all ratings of 2 or less, or 6 or above. You may comment on any observed behavior. Use the category number (below) to reference your narrative.

APPEARANCE

1. General Appearance: Specify 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_

ATTITUDE

2. Acceptance of Feedback: 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_  
Verbal/Behavior

3. Attitude toward police work 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_

KNOWLEDGE

4. Of department policies/ 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_  
procedures

5. Of Florida statutes relating 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_  
to criminal law

6. Of Florida statutes relating 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_  
to motor vehicle operation

7. Reflected in verbal & written 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_  
tests

8. Reflected in field-performance 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_  
tests

PERFORMANCE

9. Driving Skill: Normal conditions 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_

10. Driving Skill: Moderate/Stress 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_  
conditions

11. Use of RD map orientation and 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_  
response time to calls

12. Routine Forms: Accuracy/ 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_  
completeness

13. Report Writing: Organization/ 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_  
details

14. Report Writing: Level of usage/ 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_  
grammar/spelling/neatness

15. Report Writing: Appropriate 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_  
time used

16. Field Performance: Non-stress 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_  
conditions

17. Field Performance: Stress 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_  
conditions

18. Self initiated field activity 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_

19. Officer Safety: General 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_

20. Officer Safety: Signal 26/ 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_  
prisoners

21. Control of Conflict: Voice 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_  
command

22. Control of Conflict: Physical 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_  
skill

23. Use of Common Sense & Good 1 2 3 4 5 6 7 N.O. \_\_\_ T.O. \_\_\_  
Judgment

|                                              |               |                 |
|----------------------------------------------|---------------|-----------------|
| 24. Radio: Appropriate use of<br>10 Code     | 1 2 3 4 5 6 7 | N.O. __ T.O. __ |
| 25. Radio: Listen/comprehend<br>transmission | 1 2 3 4 5 6 7 | N.O. __ T.O. __ |
| 26. Radio: Articulating<br>transmissions     | 1 2 3 4 5 6 7 | N.O. __ T.O. __ |
| <u>RELATIONSHIPS</u>                         |               |                 |
| 27. With citizens: General                   | 1 2 3 4 5 6 7 | N.O. __ T.O. __ |
| 28. With minorities                          | 1 2 3 4 5 6 7 | N.O. __ T.O. __ |
| 29. Other relationships: FTO/Sgt./Lt         | 1 2 3 4 5 6 7 | N.O. __ T.O. __ |

### NARRATIVE COMMENTS

Most Acceptable Performance of the Day: \_\_\_\_\_

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Least Acceptable Performance of the Day: \_\_\_\_\_

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Additional Comments: \_\_\_\_\_

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\_\_\_\_\_  
Signature of Trainee

\_\_\_\_\_  
Training Officer's Signature

### UTILIZATION PLAN

The proposed plan will be implemented as soon as possible to develop consistency in the area of counseling and to provide the student with a clear understanding of course sequence and objectives.

The evaluation (daily observation report) will be used for a six month period by each department to evaluate the in-service students who have graduated from the Criminal Justice program for the purpose of providing feedback for future program improvement.

REFERENCES OBTAINED THROUGH  
THE FLORIDA RESOURCES IN EDUCATION EXCHANGE

EJ099795 IR500557

Testing Management Performance Objectives: A Sample Criterion Test. (Jeter, Clarence C.)

ED164074 JC790086

Academic Standards, Fall 1978. (Delaware Technical and Community College)

ED148843 TM006728

Assessing Occupational Competencies -- A CAEL Handbook. (Sharon, Amiel T.)

ED139955 CE010975

Law Enforcement Careers. Performance Objectives. (Adams, John F.)

ED139954 CE010974

Law Enforcement Careers. Performance Objectives. (Adams, John F.)

ED102435 CG009150

Screening Applicants for Employment in Law Enforcement. (Gunderson, D.F.)

ED099747 CG009420

Program Design and Curriculum Development for Police Training. (Beilin, Lois A.)

ED098134 SO007926

Law-Related Education Competencies. (Schell, Robert L.)

ED087499 JC740064

Administration of Justice Education. (Riverside City College, CA)

ED080611 TM003130

An Exploration of Behavioral Objectives for Police Promotional Examinations in New Jersey. (Goldstein, Leo S.)

ED873314 VT019152

Instructor Guidelines Basic Training Manual. (Michigan Law Enforcement Officers Training Council, East Lansing)

ED067088 JC720220

Objective and Organization & Technical Report Writing for Police. (Cox, Clarise P.)



PROGRAM: DRAFTING TECHNOLOGY

PROGRAM MANAGER: FITZHUGH MILLER  
DEPARTMENT OF ENGINEERING & CONSTRUCTION  
PENSACOLA JUNIOR COLLEGE

The program is a one-calendar year curriculum. The first term develops the student's understanding and application of drafting and its techniques. The second and third terms develop the student's theoretical understanding of several disciplines which use drafting.

The graduate may draft in one of several areas: civil, structural, architectural, machine, mechanical, pipe, electronic and electrical. Although there are many more drafting subjects, the basic understanding will be covered in the above mentioned areas.

#### TERM I

|          |                      |       |
|----------|----------------------|-------|
| DRA 0101 | Basic Drafting I     | 8 cr. |
| DRA 0102 | Basic Drafting II    | 8     |
| DRA 0103 | Basic Drafting III   | 4     |
| DRA 0104 | Descriptive Geometry | 4     |
| MAP 0101 | Applied Math I       | 5     |

#### TERM II

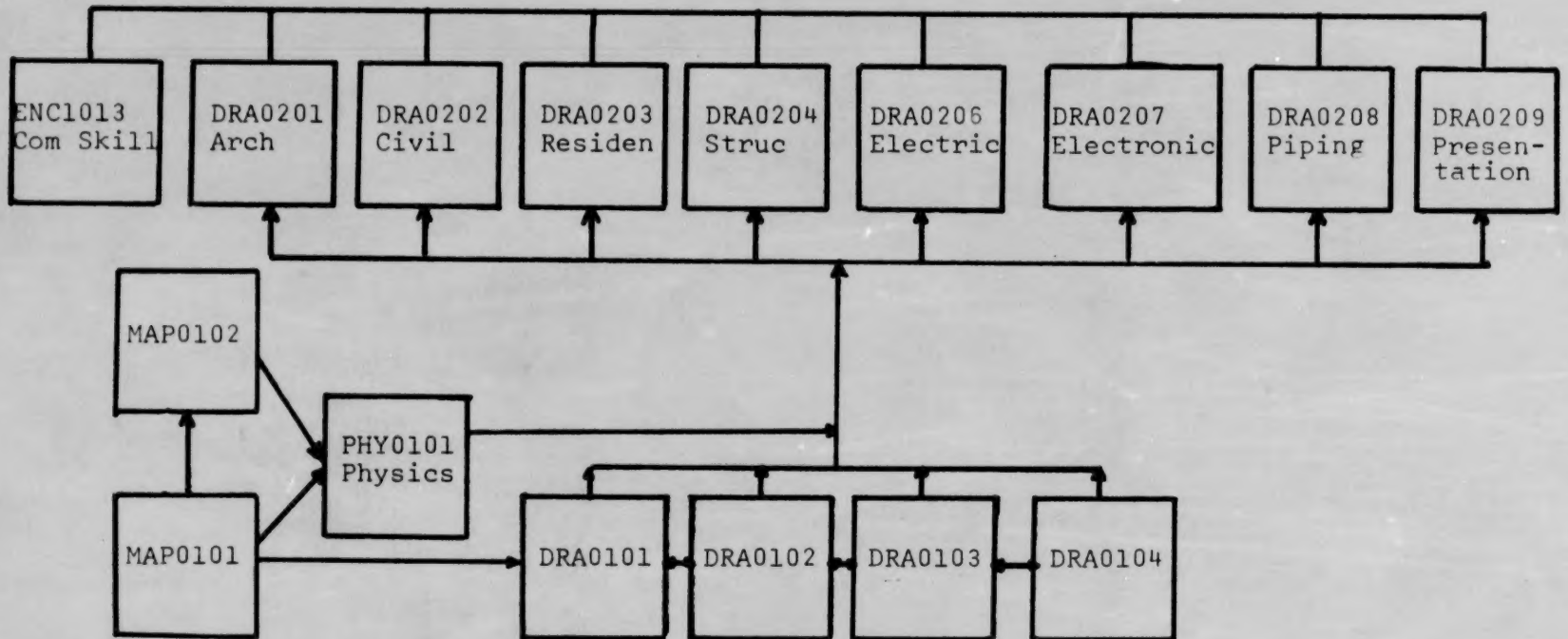
|          |                        |   |
|----------|------------------------|---|
| DRA 0201 | Architectural Drafting | 8 |
| DRA 0204 | Structural Drafting    | 8 |
| DRA 0203 | Residential Drafting   | 3 |
| DRA 0209 | Presentation Drafting  | 3 |
| MAP 0102 | Applied Math II        | 5 |

#### TERM III

|          |                            |   |
|----------|----------------------------|---|
| DRA 0202 | Civil Engineering Drafting | 8 |
| DRA 0206 | Electrical Drafting        | 4 |
| DRA 0207 | Electronic Drafting        | 4 |
| DRA 0208 | Piping Drafting            | 4 |
| ENC 1013 | Communication Skills       | 3 |
| PHY 0101 | Applied Physics I          | 5 |



# PROGRAM MAP



MAJOR LEARNING OUTCOMES FOR DRAFTING TECHNOLOGY PROGRAM

The Drafting Technology student will apply/use:

- a. Standard applications of drafting line types and projections
- b. Dimensioning methods unique for each discipline
- c. Uniform block lettering
- d. The organization of assembly drawings
- e. Knowledge of the fundamental theories of the most employable disciplines

## MAJOR LEARNING OUTCOMES FOR COURSES

### DRA 0301 Basic Drafting I

The student will demonstrate the application of all the line types in context with standard drafting practice through the use of the assigned drafting equipment, mathematical solutions of sheet composition, block lettering in a variety of heights, orthographic projection techniques, and sectioning.

### DRA 0302 Basic Drafting II

The student will demonstrate the four methods of dimensioning on drawings done in DRA 0301, oblique and isometric pictorial drawings from three view drawings complete with pictorial dimensioning with the use of ellipse templates.

### DRA 0303 Basic Drafting III

The student will demonstrate both assembly and size/shape descriptions through the use of exploded pictorial views, assembled pictorial sections and standard orthographic techniques.

### DRA 0404 Structural Drafting

Through typical field projects the student will produce connection details, framing details, shop drawings, mill drawings, and concrete placement schedules for steel, wood, and concrete structures.

### DRA 0409 Presentation Drafting

This technique course introduces the student to various presentation methods where little or no "art" talent is required. Upon completion the student will be able to produce professional color presentations using ink, mylar, zip-a-tone color press-on letters, and some perspective drafting.

#### DRA 0402 Civil Engineering Drafting

Through the use of mathematics (which will be reviewed for the first 20 contact hours), the student will calculate errors of closure, latitude and departure, areas, plot horizontal curves, grid point elevations, and road grades. The student will draft property descriptions, curves, contour maps, and road profiles from the mathematical data.

#### DRA 0406 Electrical Drafting

The student will demonstrate his/her ability to draft from engineering data, the total electrical requirements for a commercial building suitable for construction and bidding.

#### DRA 0409 Residential Drafting

Upon completion, the student will be able to complete a set of construction documents of a single family dwelling acceptable for the various building permits and lending agencies. The design is to be developed within given parameters and the construction techniques indigious.

#### EGN 1130 Graphics I

1. Given a drawing showing the horizontal and frontal views of a line in space, and given the necessary drafting equipment, the student will construct a view of the line which shows the line true length, with 100% accuracy.
2. Given a drawing showing the horizontal and frontal views of a line in space, and given the necessary drafting equipment, the student will determine the bearing and slope angle of the line, with 100% accuracy.
3. Given a drawing showing the horizontal and frontal views of a plane in space, and given the necessary drafting equipment, the student will determine the dihedral angle between the planes, with 100% accuracy.

## ETD 1100 Architectural Drafting

Given the appropriate code restrictions, zoning ordinances and design parameters, the student will demonstrate job-entry level drafting skills, the use of symbols and the vocabulary natural to the Architectural and Engineering professions in the preparation of detailed working drawings of a small commercial building.

1. The student will be able to create and draw the normal complement of working drawings necessary to delineate his needs to a contractor to receive acceptable bids.
2. Given design sketches the student will determine the drawings necessary to complete the project.

TO: Advisory Committee and Employers of Drafting  
Technology Students

FROM: Fitzhugh Miller, Program Director

DATE:

RE: Currently Required Skills of Graduates

We need input periodically to modify our program to suit current needs. We know the industry and employer needs change and this survey is an effort to keep abreast of those changes. A good example of this is ink and mylar. Whereas ink and mylar are used quite a bit, we didn't feel the demand justified the expense both to the school and the student. However, if this survey shows a definite increase in inking, then that will be our justification to the budget proposal for the additional funds needed for the equipment.

Please remember our drafting program has no speciality as it would fragment our enrollment, resulting in small classes which we can't economically feasibly teach. If you would only respond to those items germane to your discipline, it would be appreciated.

In terms of both Pensacola Junior College and other school's graduates, you felt their expertise in the following areas was:



# EMPLOYER SURVEY

Running Blue Prints

Correcting Check Sheets

Line Work with Pencil

Lettering with Pencil

Lettering with Template

Lettering with Lenoy

Line Work with Ink

Line Work with Plastic Leads

General Mathematics

Triginometry

Following Oral Instructions

Following Written Instructions

Works without Supervision

Independent Problem Solving

Research

Client Negotiations

Laws/Liabilities

Technical Writing (Reports, Specs, etc.)

Take-offs

Estimating

Dimensioning

Sectioning

Tolerancing

Metric Dimensioning

Curve Data

Lattitude and Departure

Error of Closure

Property Descriptions

Field Note Interpretation

Contour Lines

Out and Fill

Road Design

Road Profile

Drainage/Run-off

Steel Shop Drawings

Connection Details

Framing Plans

Vector Analysis

Joint Analysis

GRADUATES HAVE A GOOD  
WORKING SKILL

GRADUATES NEED MORE  
EDUCATION IN THIS AREA

GRADUATES ARE LACKING IN  
THIS ABILITY

IS USED IN DAY-TO-DAY  
PRACTICE

IS SOMETIMES NECESSARY

IS NOT A NECESSARY SKILL

# EMPLOYER SURVEY

Beam Design  
 Column Design  
 Steel Tables  
 Concrete Placement  
 Re-Bar Schedules  
 Load Calculations  
 Foundation Design  
 Millwork Details  
 Truss Analysis  
 Deflection  
 Joist Span Data  
 HVAC Loads  
 Plumbing Risers  
 Design  
 Perspectives  
 Model Building

## REFERENCE MATERIAL

Dictionary  
 American Institute of Steel Construction Manual  
 Architectural Graphic Standards  
 Southern Standard Building Code  
 Escambia Co. Electrical Code  
 Pensacola Electrical Code  
 National Electrical Code  
 Florida State Energy Code  
 Escambia Co. Building Code  
 Nation Fire Protection Agency Code  
 Pensacola City Fire Code  
 Pensacola Building Ordinances  
 Pensacola Zoning Ordinances  
 Florida Hotel & Restaurant Commision Code  
 Escambia County Plumbing Code  
 Santa Rosa Island Authority Building Code  
 Sweet's Catalogs  
 Manufacturers Catalogs

GRADUATES HAVE A GOOD  
WORKING SKILL

GRADUATES NEED MORE  
EDUCATION IN THIS AREA

GRADUATES ARE LACKING IN  
THIS ABILITY

IS USED IN DAY-TO-DAY  
PRACTICE

IS SOMETIMES NECESSARY

IS NOT A NECESSARY SKILL

COMPANY'S NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

## IMPLEMENTATION PLAN

The first phase of implementation is to approach the Advisory Committee to define the functional abilities of new employees.

The second phase is to assure that the major learning outcomes of the terminal courses match as much as practical those skills defined by the Advisory Committee.

The third phase is to assure that all the courses minimum beginning skills and their pre-requisite course major learning outcomes leave no gaps.

The fourth phase is to determine if the minimum entry level skills for the first courses do not excluded potential students or alienate beginners.

The fifth phase of implementation is to analyze our current program in terms of the student's viewpoint. If the student clearly understands what he/she is buying, then the success rate should increase and the drop-out rate decrease.

The sixth phase is to provide counselors with the knowledge to explain to the student what is available.

The seventh phase is to provide literature directly to the student that can be understood without interpretation.

The eighth phase is to start the whole process over again.

REFERENCES OBTAINED THROUGH  
THE FLORIDA RESOURCES IN EDUCATION EXCHANGE

ED133459      CE008738  
Resource Guide for Performance-Based Drafting Instruction.  
(Day, Gerald F.)

ED139940      CE010958  
Drafting, Performance Objectives. Basic Course. (Allen,  
Charles)

ED137511      CE010060  
Community College Technical Mathematics Project. (Self,  
Samuel L.)

ED146349      CE012581  
Drafting. Competency Based Curriculum. (Everly, Al)

ED150312      CE014411  
Applied Physics Modules Selected for Architectural and  
Civil Drafting Technologies. (Waring, Gene)

PROGRAM: ENVIRONMENTAL ENGINEERING TECHNOLOGY

PROGRAM MANAGER: DR. JAMES WARD  
DEPARTMENT OF ENGINEERING & CONSTRUCTION  
PENSACOLA JUNIOR COLLEGE

The two-year Associate of Science Environmental Engineering Technology Program is designed to prepare the graduate for a position of responsibility in the environmental engineering work force. It teaches him/her to analyze and solve technological problems related to environmental engineering; to perform environmental tests and to report the results of those tests efficiently; and to perform various other tasks designated by the environmental engineer.

The program encompasses a variety of subjects in the environmental engineering field--water treatment, wastewater treatment, air pollution, design of sewerage systems, chemical and biological analysis of pollutants, etc.--giving the graduate many possibilities for future employment with major industrial concerns or governmental agencies.

Freshman Year  
Term I

|           |                             |       |
|-----------|-----------------------------|-------|
| MTB 1321  | Technical Math I            | 3 cr. |
| ETD 1100C | Architectural Drafting      | 3     |
| BCN 2708  | Construction Documents      | 3     |
| CHM 1015  | Intro. to College Chemistry | 3     |
| ENC 1103  | English Composition         | 3     |

Term II

|          |                                 |   |
|----------|---------------------------------|---|
| MTB 1322 | Technical Math II               | 3 |
| ENC 1313 | Technical Writing               | 3 |
| PHY 0101 | Applied Physics I               | 5 |
| PCB 2033 | Intro. to Environmental Science | 3 |

Sophomore Year  
Term I

|           |                         |   |
|-----------|-------------------------|---|
| ETC 1250  | Properties of Materials | 3 |
| APB 1750  | Microbiology            | 3 |
| APB 1750L | Microbiology Lab        | 1 |
| SSI 1012  | Social Science Survey   | 3 |
| ETC       | Drainage & Sewer Design | 3 |
| EVS 2301  | Air Pollution           | 3 |

Term II

|          |                       |   |
|----------|-----------------------|---|
| EVS      | Treatment Plants      | 4 |
| EVS 2231 | Regulatory Agency Reg | 3 |
| — —      | Drafting Elective *   | 3 |
| — —      | Technical Electives** | 3 |
| — —      | Technical Electives** | 3 |

\*Drafting elective shall be selected from: ETD 1152, ETD 2121, ETD 2003.

\*\*Technical elective shall be selected from: BCN 2230, BCN 2610, ETC 2220, ETC 2410, EVS 2220, EVS 2241.



## RATIONALE FOR PROGRAM CHANGE

The members of the Engineering & Construction Advisory Committee have unanimously agreed that several modifications should be made in the Environmental Engineering Technology program.

Primary reasons cited by the committee spokesman were:

1. Considerable duplication of material content in several existing courses. Solution: combine into fewer courses
2. Lack of published prerequisites for many courses. Solution: show required prerequisites in future catalog printings.





MAJOR LEARNING OUTCOMES  
ENVIRONMENTAL ENGINEERING TECHNOLOGY

1. The student will explain (with diagrams) the operation of a typical water treatment plant.
2. The student will explain (with diagrams) the operation of a typical wastewater treatment plant.
3. Given a set of Florida Department of Environmental Regulation (DER) standards, the student will locate appropriate information to determine the legality/illegality of possible pollution standards violations.
4. Given a tract of land and necessary rainfall data, the student will design a storm sewer system capable of draining the given area.
5. Given a residential or business area and necessary population data, the student will design a sanitary sewer system for the area.
6. The student will explain (with diagrams) the operations of a typical dry-type pollutant collector.
7. The student will explain (with diagrams) the operation of a typical wet-type pollutant collector.

Program Goals

1. The student is prepared to secure employment in program-related occupations.
2. The student is equipped to retain employment in program-related occupations.
3. The student is equipped to advance rapidly in program-related occupations.

## MAJOR LEARNING OUTCOMES OF THE COURSES

### ETD 2121 Civil Engineering Drafting --- 3 Credit Hours (Elective)

The student, given zoning and sub-division criteria, will be able to demonstrate the symbolism, vocabulary and job-entry level drafting techniques as produced in the offices of Civil Engineers.

1. Using surveyors' notebooks, convert point grades to contour topographic working drawings
2. Solve road curve data
3. Interpolate topographic contours
4. Solve and correct for instrument error
5. Draw sub-division working drawings
6. Identify map symbols correctly and their use in job-entry level acceptability on working drawings

### ETD 1100 Architectural Drafting --- 3 Credit Hours

Given the appropriate code restrictions, zoning ordinances and design parameters, the student will demonstrate job-entry level drafting skills, the use of symbols and the vocabulary natural to the Architectural and Engineering professions in the preparation of detailed working drawings of a small commercial building.

1. The student will be able to create and draw the normal complement of working drawings necessary to delineate his needs to a contractor to receive acceptable bids.
2. Given design sketches the student will determine the drawings necessary to complete the project.

### ETC 2220C Soils & Foundations --- 4 Credit Hours

1. Given a soil sample and necessary laboratory equipment, the student will perform the necessary tests to determine permeability of the soil, with 90% accuracy.
2. Given a soil sample and necessary laboratory equipment, the student will perform the necessary tests to determine the specific gravity, with 90% accuracy.
3. Given a sample of cohesive soil, and necessary laboratory equipment, the student will perform the necessary tests to determine the direct shear on the cohesive soil, with 90% accuracy.

BCN 2230 Concrete Construction --- 2 Credit Hours (Elective)  
BCN 2230L Concrete Construction Lab --- 1 Credit Hour (Elective)

1. The student will explain "concrete mix ratio," with 100% accuracy.
2. Given a slump-test mold and mixed concrete, the student will demonstrate the proper method of pouring of concrete into the slump-test mold, with 100% accuracy.
3. The student will explain the importance of the "water-cement ratio" in concrete mixing, with 100% accuracy.

BCN 1250 Properties of Materials --- 3 Credit Hours

Upon completion of the course the student will be able to demonstrate a practical knowledge in the use of the basic building blocks of the Construction and Engineering Sciences such as:

1. The stress factors delineating use limits in metallic and non-metallic materials, organic and inorganic units, the plastics, rubber, and woods
2. Write contracts which outline responsibilities
3. Given specifications:
  - a. Outline insurance requirements and file appropriately
  - b. Use proper forms for proposals, bidding, termination, placement of liens, file claims for liability, payment itemization, and follow proper supervisory procedures.

EVS 2220 Chemistry of Waste Treatment --- 4 Credit Hours  
(Elective)

1. Given a sample of wastewater, and given necessary laboratory equipment, the student will determine the acidity/alkalinity of the sample, with 80% accuracy.
2. Given a sample of wastewater, and given necessary laboratory equipment, the student will determine the chemical oxygen demand (COD) of the sample, with 80% accuracy.
3. Given a sample of wastewater, and given necessary laboratory equipment, the student will determine the biochemical oxygen demand (BOD) of the sample, with 80% accuracy.

ETC 2410 Applied Structural Design --- 3 Credit Hours (Elective)

1. Given a theoretical situation in which a steel beam must be designed to carry a given load over a given span, the student will determine the most economical size steel beam to use, with 90% accuracy.
2. Given a theoretical situation in which a concrete beam must be designed to carry a given load over a given span, the student will determine the most economical size reinforced concrete beam to use, with 90% accuracy.
3. The student will write the definitions of the following terms, with 90% accuracy:

|                 |                           |
|-----------------|---------------------------|
| (a) Tension     | (g) Centroid              |
| (b) Compression | (h) Deformation           |
| (c) Shear       | (i) Modulus of Elasticity |
| (d) Torsion     | (j) Moment of a Force     |
| (e) Reaction    | (k) Cantilever            |
| (f) Bending     | (l) Moment of Inertia     |

BCN 2610 Construction Estimating --- 3 Credit Hours (Elective)

1. Given a set of plans and specifications for a small commercial building, the student will prepare a detailed estimate of the cost of the building, suitable for bidding purposes. Final bid price shall be within 10% of price determined by instructor.
2. Given a set of plans and specifications for a residential building, the student will prepare a detailed estimate of the cost of the building, suitable for bidding purposes. Final bid price shall be within 10% of price determined by instructor.

EVS 2231 Regulatory Agency Regulations --- 3 Credit Hours

1. Given a set of Florida Department of Environmental Regulation (DER) standards and a theoretical situation in which violation of a DER air pollution standard is possible, the student will locate the proper document and determine whether or not the situation is in violation, with 100% accuracy.
2. The student will list the Federal and State (Florida) agencies which govern environmental standards, with 80% accuracy.



3. The student will list the three operating divisions of the Florida Department of Environmental Regulation (DER), with 100% accuracy.

ETD 2003 Piping Drafting --- 3 Credit Hours (Elective)

1. Given criteria for a proposed piping system, and given necessary drafting equipment, the student will construct a schematic flow diagram for the system.
2. Given a schematic flow diagram for a piping system, and given necessary drafting equipment, the student will construct detailed plan and elevation views of the system.
3. Given plan and elevation views of a piping system, and given necessary drafting equipment, the student will construct an isometric drawing of the system.

EVS 2241 Hydrology --- 4 Credit Hours (Elective)

1. Given a particular plot of land, the time of concentration of rainfall, and the runoff coefficient for the plot of land, the student will compute the amount of runoff, using the Rational Formula, with 100% accuracy.
2. The student will explain the Hydrologic Cycle, with 100% accuracy.
3. The student will write definitions for eight of the following terms:

|                        |                  |
|------------------------|------------------|
| (a) precipitation      | (f) runoff       |
| (b) evaporation        | (g) hydrology    |
| (c) transpiration      | (h) hydrograph   |
| (d) evapotranspiration | (i) watershed    |
| (e) infiltration       | (j) hydrostatics |

ETC 2521 Drainage and Sewer Design --- 3 Credit Hours

1. Given rainfall data and tables to work from, the student will calculate the amount of runoff (water) from a particular area, with 90% accuracy.
2. The student will design a storm sewer system for a given parcel of land, with 90% accuracy.
3. The student will design a sanitary sewer system for a given residential area, with 90% accuracy.



EVS 2301 Air Pollution --- 3 Credit Hours

1. The student will diagram the operation of a typical dry-type pollutant collector, with 100% accuracy.
2. The student will diagram the operation of a typical wet-type pollutant collector, with 100% accuracy.
3. The student will list ten kinds of particulate matter, with 80% accuracy.

EVS 2251 Treatment Plants ---- 4 Credit Hours

1. The student will explain the operation of a typical water treatment plant, with 90% accuracy.
2. The student will explain the operation of a typical wastewater treatment plant, with 90% accuracy.
3. The student will define the components of a treatment system (water or wastewater), with 100% accuracy.

ETD 1152C Structural Drafting ---3 Credit Hours (Elective)

Given the appropriate regulatory control requirements, the codes, and the zoning ordinance restrictions, the student will make preliminary design calculations and draw concrete foundation plans and details and steel roof framing plans and details and from the detail drawings prepare shop drawings all in the style and completeness acceptable as job-entry proficiency, for a small commercial building.

1. The student will demonstrate job-entry level skills in the use of appropriate symbols of structural detailing.
2. The student will solve problems of the design of members expected of apprentice structural drafters.
3. The student will demonstrate drafting skills that are employable in the offices of professionals in the field of Structural Engineering.

INDUSTRIAL TASK ANALYSIS  
ENVIRONMENTAL ENGINEERING TECHNOLOGY

TO: Industry Representatives and Graduates  
FROM: Jim Ward, Head/Engineering & Construction Department  
DATE:

In order that we may be able to provide you with (1) graduates capable of working in industry and (2) upgraded technicians, we need information from you to assist us in updating our courses. We have listed a group of tasks which we are asking you to evaluate. The evaluation system is quite simple. Please examine each task and make a determination regarding it. Some, I am certain, are necessary; others desirable. Yet some others will not be needed. Please indicate your decisions, since this is the best method we have to plan for future course improvements. Please add any additional tasks you feel are needed.

While making your decision, please bear in mind that we are a post-secondary or college level institution and our programs are aimed at something slightly above pure "entry" level.

Your cooperation is greatly appreciated in this effort and we hope to become more useful to you as an educational facility as time progresses.

# EMPLOYER SURVEY

## TASK ANALYSIS

- |                                                          | NECESSARY | DESIRABLE | UNNECESSARY |
|----------------------------------------------------------|-----------|-----------|-------------|
| 1. Knowledge of water treatment plant components         |           |           |             |
| 2. Knowledge of wastewater treatment plant components    |           |           |             |
| 3. Knowledge of architectural drafting                   |           |           |             |
| 4. Knowledge of structural drafting                      |           |           |             |
| 5. Knowledge of civil engineering drafting               |           |           |             |
| 6. Knowledge of piping drafting                          |           |           |             |
| 7. Proficiency in use of basic mathematical operations   |           |           |             |
| 8. Proficiency in use of algebra                         |           |           |             |
| 9. Proficiency in use of trigonometry                    |           |           |             |
| 10. Proficiency in use of chemistry laboratory equipment |           |           |             |
| 11. Knowledge of physics - mechanics                     |           |           |             |
| 12. Knowledge of physics - fluids                        |           |           |             |
| 13. Knowledge of physics - heat                          |           |           |             |
| 14. Calculation of rainfall runoff                       |           |           |             |
| 15. Calculation of sewage quantities                     |           |           |             |
| 16. Design of storm sewer systems                        |           |           |             |
| 17. Design of sanitary sewer systems                     |           |           |             |
| 18. Design of water treatment plants                     |           |           |             |
| 19. Design of wastewater treatment plants                |           |           |             |
| 20. Familiarity with Federal EPA standards               |           |           |             |
| 21. Knowledge of structural design - steel               |           |           |             |
| 22. Knowledge of structural design - concrete            |           |           |             |
| 23. Use of spectrophotometer                             |           |           |             |
| 24. Chemical analysis of water or wastewater             |           |           |             |
| 25. Familiarity with Florida DER standards               |           |           |             |
| 26.                                                      |           |           |             |
| 27.                                                      |           |           |             |

## ENVIRONMENTAL ENGINEERING TECHNOLOGY

### Utilization Plan

1. Program maps will be given to beginning students as a guide and as a part of their orientation.
2. Suggested revisions for the program have already been made.
3. Required performance requirements for each unit of instruction will be given to students.

REFERENCES OBTAINED THROUGH  
THE FLORIDA RESOURCES IN EDUCATION EXCHANGE

ED154983      SE023782  
Workbook. Basic Mathematics and Wastewater Processing  
Calculations. (New York State Department of Environmental  
Conservation.)

ED066576      VT016377  
Criteria for the Establishment and Maintenance of Two Year  
Post High School Wastewater Technology Training Programs.  
(Clemson University.)

ED051815      JC710189  
A "Career Ladder" Approach to Junior College Curriculum.  
(Schrupp, Harold A.)

ED025618      VT006409  
Program of Teacher Education for Environmental Technology  
(POTEET). National Sanitation Foundation, Ann Arbor, Michigan.

ED121365      JC760205  
Self-Paced Learning in Civil Engineering Technology: An  
Approach to Mastery. (Sharples, D. Kent.)

## FOOD SERVICE: DIETETIC TECHNICIAN, A.S.

This program shown below provides a Food Service Management emphasis. If you wish to stress Nutrition and Diet Therapy, you should replace the course marked with the asterisk (\*) with the following: MAN 2000, EME 2001 or CHD 2341, HUN 1410, and DIE 2201.

### Freshman Year

#### Term I

|           |                       |       |
|-----------|-----------------------|-------|
| HUN 1200  | Basic Nutrition       | 3 cr. |
| FSS 1001  | Orientation           | 3     |
| FSS 1202C | Foods                 | 4     |
| APB 1060  | Food Microbiology     | 3     |
| APB 1060L | Food Microbiology Lab | 1     |
| ENC 1103  | English Composition   | 3     |

#### Term II

|                      |                                    |   |
|----------------------|------------------------------------|---|
| FSS 1401             | Food Service Equipment             | 2 |
| FSS 2221             | Quantity Food                      | 3 |
| FSS 1312             | Personnel Management*              | 3 |
| HUN 1290             | Applied Nutrition                  | 3 |
|                      | Physical Science (Chem. Preferred) | 3 |
| <del>FSS 2940C</del> | Supervised Practicum               | 3 |

### Sophomore Year

#### Term I

|           |                                |   |
|-----------|--------------------------------|---|
| FDS 2201  | Sanitation & Safety            | 2 |
| FSS 2100  | Menu Planning & Food Merch*    | 2 |
| FSS 2300  | Management Systems I*          | 3 |
| MAN 2100  | Human Relations                | 3 |
| MGF 1113  | Gen Math or MTB 1103 Busn Math | 3 |
| FSS 2940C | Supervised Practicum           | 3 |

#### Term II

|           |                                     |   |
|-----------|-------------------------------------|---|
| SSL 1011  | Social Science Survey or Psychology | 3 |
| FSS 2120  | Purchasing                          | 3 |
| FSS 2930  | Food Service Seminar                | 1 |
| FSS 2305  | Management Systems II *             | 3 |
| FSS 2940C | Supervised Practicum                | 3 |
| ACC 2001  | Accounting or MAN 1012              | 3 |
| AMH 1550  | U. S. Constitution                  | 1 |



PROGRAM: DIETETIC TECHNICIAN

PROGRAM MANAGER: JEANNE H. BOONE  
DEPARTMENT OF HOME ECONOMICS  
PENSACOLA JUNIOR COLLEGE, FLORIDA

A Dietetic Technician is a technically skilled person who has successfully completed an associate degree program which meets the standards established by the American Dietetic Association. The student may specialize in Management or in Nutrition and Diet Therapy. The dietetic technician, working under the guidance of a Registered Dietitian (R.D.) has responsibilities in assigned areas in food service management; in teaching food and nutrition principals, and in dietary counseling.

The program includes a required nine credit hours (or 450 clock hours) of Practicum, which provides a supervised field experience in area food service facilities. Graduates of the nutrition and diet therapy tract may find employment in health care facilities (hospitals, nursing homes, health departments) and in school food services; graduates of the management tract may find employment in any of the above areas, plus commercial food service operations, such as restaurants. The Dietetic Technician is an integral part of the complex changing world of food service. They can provide leadership, direct supervision, and assist in providing nutritional care service to individuals or groups for the efficient operation of a food-service facility. As of April 1979, ADA recommends a minimum annual starting salary of \$11,600.

## RATIONALE FOR PROPOSED CHANGES IN DIETETIC TECHNICIAN PROGRAMS

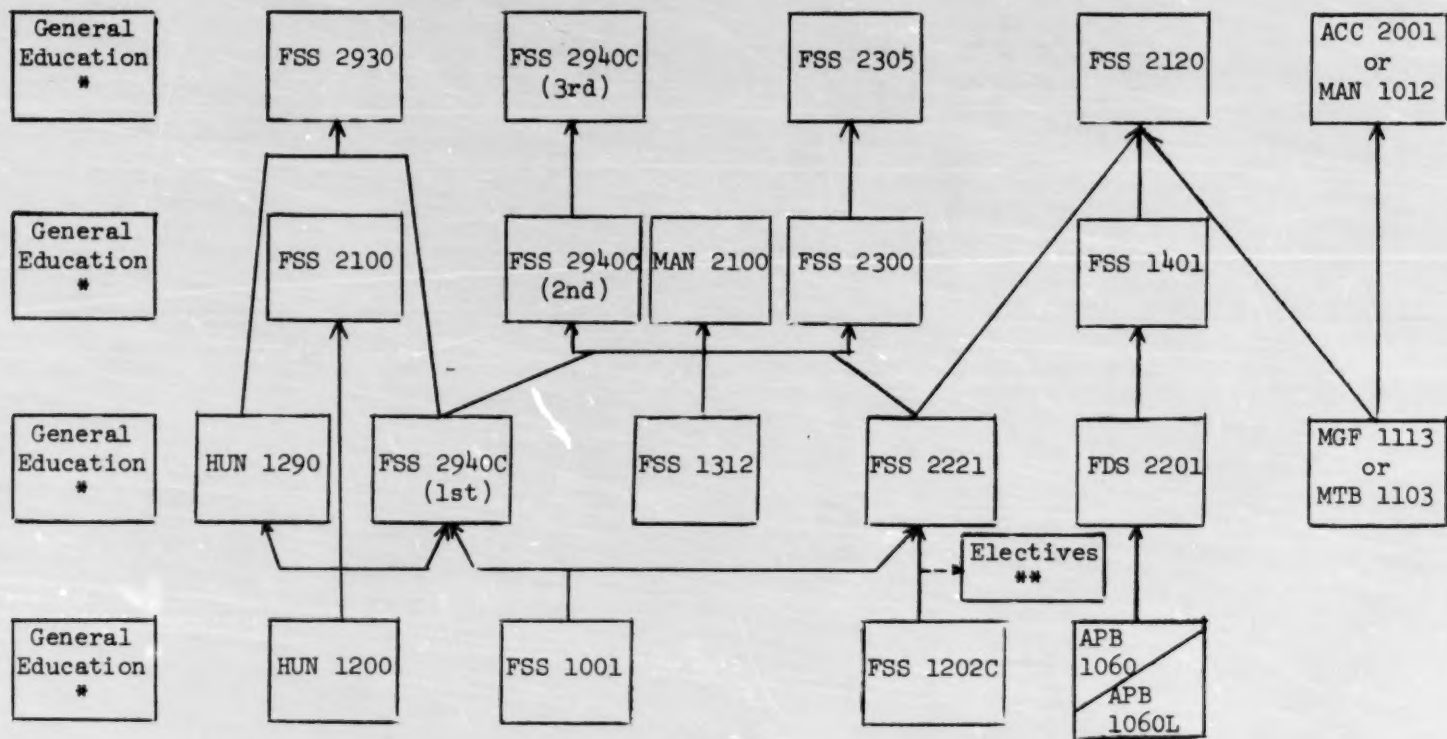
1. Add Orientation to Food Service (FSS 1001) as a second prerequisite for Quantity Food Production (FSS 2221), to provide background theories in Quantity Food purchasing, control, inventory, receiving, storage, and preparation of food.
2. Add Sanitation and Safety (FSS 2201) as a prerequisite for Food Service Equipment (FSS 1401), to provide the student with best possible background in safety techniques in quantity food production before entering the equipment lab.
3. Add Basic Nutrition (HUN 1200) as a prerequisite for Menu Planning and Food Merchandising (FSS 2100), to provide student with adequate nutrition background for more effective menu planning.
4. Add Food Service Practicum in Nutrition Care (FSS 2940C) to the prerequisites for Modified Diets (DIE 2201), in order to give student exposure to the patient care setting so that his/her study of modified diets, charting, and patient interviewing will be more meaningful.
5. Add as prerequisites to Purchasing (FSS 2120) the following: Quantity Food Production (FSS 2221), Food Service Equipment (FSS 1401), and either MGF 1113 (General Math) or MTB 1103 (Business Math). These courses would help the purchasing student to be familiar with food and equipment items to be purchased and enable them to use necessary math skills to meet given budgets and use forms properly.
6. To have Foods (FSS 1202C) as a prerequisite for any of the three electives to give student minimum cooking skills and knowledge for use in these courses.
7. Prior 16 hour prerequisite in food service for Management Systems I (FSS 2300) specifically established as the following courses:

|                                        | hours |
|----------------------------------------|-------|
| Quantity Food Production (FSS 2221)    | 3     |
| Personnel Management (FSS 1312)        | 3     |
| Supervised Practicum (1st) (FSS 2940C) | 3     |
| Orientation to Food Service (FSS 1001) | 3     |
| Foods (FSS 1202C)                      | 4     |
8. Prior 12 hour prerequisite in food service for Food Service Seminar (FSS 2930) specifically established as the Following courses:

|                                        |       |
|----------------------------------------|-------|
|                                        | hours |
| Applied Nutrition (HUN 1290)           | 3     |
| Supervised Practicum (FSS 2940C)       | 3     |
| Basic Nutrition (HUN 1200)             | 3     |
| Orientation to Food Service (FSS 1001) | 3     |

9. MGF 1113, General Math will be offered as a special section for food service students only, using a different text and dealing with math principals applied to quantity food production and purchasing. This would be the preferred math for this student.

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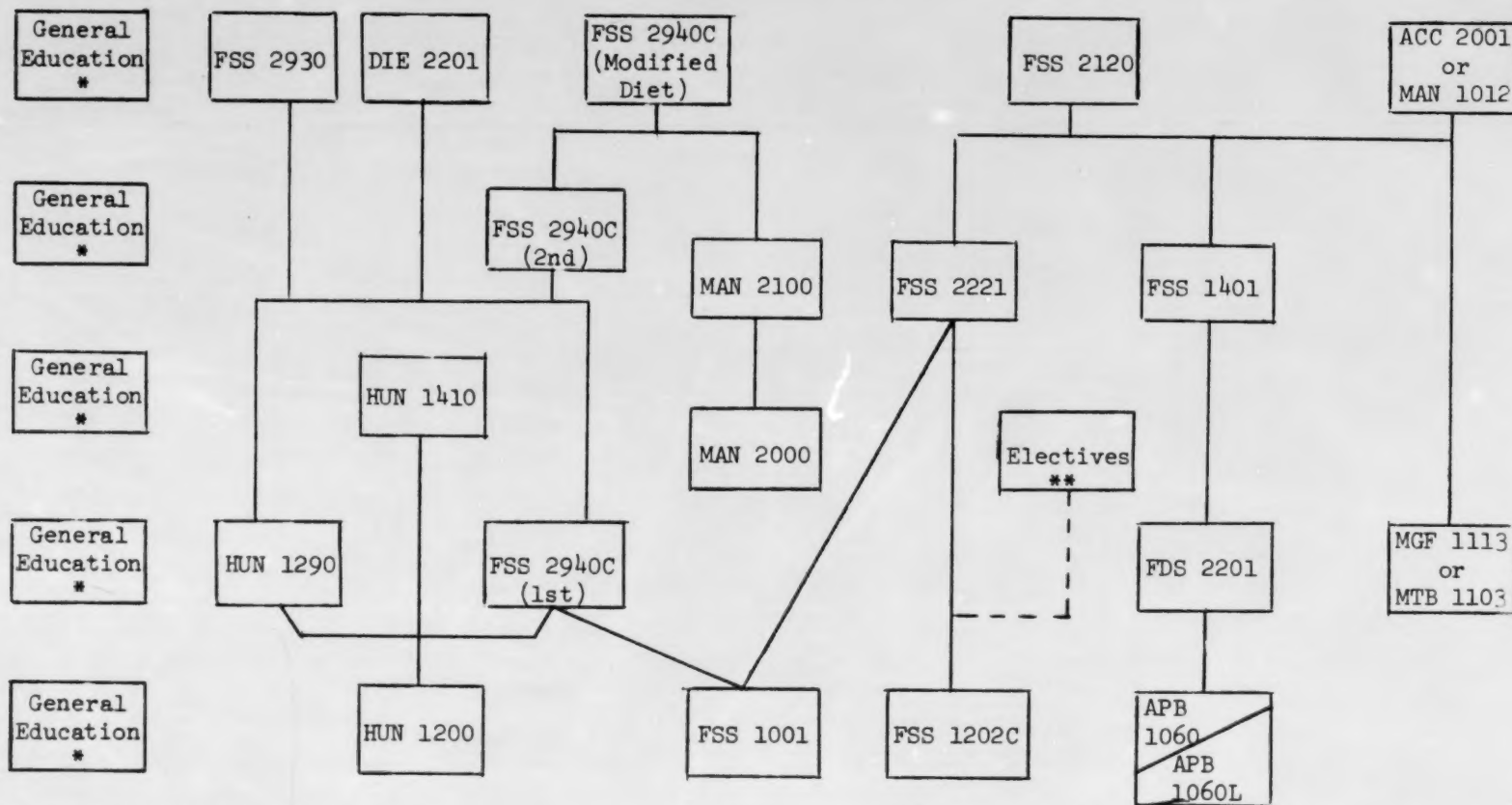
\*General Education:

|          |                                 |
|----------|---------------------------------|
| ENC 1103 | English Composition             |
| SSL 1011 | Social Science Survey           |
| OR       |                                 |
| PSY 2012 | General Psychology              |
| CHM 1015 | Chemistry (or Physical Science) |
| AMH 1550 | American Constitution           |

## ## Electives

|          |                                  |
|----------|----------------------------------|
| FSS 2284 | Catering                         |
| FSS 2244 | Convenience Foods                |
| FSS 2210 | Meal Planning<br>& Table Service |

PROGRAM MAP FOR A.S. DEGREE IN DIETETIC TECHNOLOGY - NUTRITION AND DIET THERAPY



\*General Education:

ENC 1103 English Composition  
 SSL 1011 Social Science Survey  
 OR  
 PSY 2012 General Psychology  
 CHM 1015 Chemistry (or Physical Science)  
 AMH 1550 American Constitution  
 EME 2001 Survey of Instructional Media

\*\*Electives:

FSS 2284 Catering  
 FSS 2244 Convenience Foods  
 FSS 2210 Meal Planning  
 & Table Service

PROGRAM Objectives: A.S. Degree in Dietetic Technology -  
Food Service Management

1. The student will be able to plan, supervise, and carry out meal service, using appropriate procedures and tools.
2. The student will be able to demonstrate appropriate personnel functions, including selection of personnel, training and evaluation, and writing job descriptions, specifications, and work schedules.
3. The student will be able to correctly use nutrition information to guide individuals and families in food selection, preparation, and menu planning.
4. The student will be able to assist in overall management systems, including writing of policies and procedures, public relations, budget preparations, forecasting, control, and accreditation/licensing standards.

PROGRAM Objectives: A.S. Degree in Dietetic Technology -  
Nutrition and Diet Therapy

1. The student will be able to plan, supervise, and carry out meal service, using appropriate procedures and tools.
2. The student will be able to correctly use nutrition information to guide individuals and families in food selection, preparation, and menu planning. This includes employee inservices on nutrition.
3. The student will be able to accurately obtain, evaluate, and utilize basic dietary history information for planning nutritional care.
4. The student will be able to assist the dietitian in assessing a patients' nutritional status.



## COURSE OBJECTIVES

### HUN 1200 Basic Nutrition for Food Service

1. Given a food composition table and guidelines for a dietary intake record, the student will evaluate their diet for nutritional adequacy, comparing daily nutrient averages to the RDA and U.S. Dietary Goals. Evaluation should include written paragraph summarizing qualities of diet and suggestions for improvement.
2. In written tests, the student will name and identify the major classes of nutrients, their functions, food sources, and simplified chemical structures.
3. Given a diagram of the gastro-intestinal tract, the student will label all parts and describe the process of human digestion. Major chemical and mechanical digestive processes for each class of nutrients should be identified.
4. Given the RDA's and a food composition table, the student will write a nutritionally adequate one-day menu for a healthy adult of given age and sex. Adequacy will include meeting  $\frac{2}{3}$  the RDA.
5. The student will identify and discuss human metabolic and weight control mechanisms, including a list of factors that may affect the dietary habits of people.

### HUN 1410 Child Nutrition

1. In written tests, the student identifies and explains the nutrient needs and food habits of children (prenatal through adolescence) in the context of their role in the social, mental, and physical development of the child, including diet-related health problems among children.
2. Given forms, the student observes and records eating behaviors of different age children. Observations will include evaluation of child's menu and explanation of eating and social skills appropriate for age group.
3. Given menu-planning guidelines, the student plans menus that are practical, well-balanced, and suitable for various age groups, including pregnancy and preschool.

4. Given resources, the student plans effective nutrition activities for children of a chosen age group. A minimum of two references must be used, objectives for the lesson clearly defined, and A-V materials incorporated. When possible, lesson will be given at local day care centers.
5. Given written tests, the student identifies and explains current issues and programs concerned with nutrition during the growing years, with special emphasis on day care and school lunch programs.
6. Given a list of suggested resources, the student develops a file of current materials in child nutrition, including readings on mealtime as a learning experience, special diets, and nutrition programs relating to human growth and development. At least one article for each age group should be included.

#### HUN 1290 Applied Nutrition

1. Given a suggested reference list, the student will obtain updated information on nutrition products, programs, and services from local and national organizations. A minimum of three sources for these materials must be contacted and replies and/or information obtained.
2. Given a list of current nutrition programs and agencies, the student will state their functions and local availability to 90% accuracy.
3. The student will describe nutritional problems resulting from new food patterns in both the U.S. and third world non-industrialized societies. Specific nutrient excesses or deficiencies must be incorporated into the descriptions.
4. Given a list of dietary problems, the student will be able to identify with 90% accuracy those nutrition problems associated with pregnant women, children, teenagers, adults, and the elderly.
5. Given a sample nutrition-related fad or dietary claim, the student will be able to evaluate the claim, including in the evaluation ways to recognize the claim as untrue and its potential effectiveness or harm to the consumer.

#### DIE 2201 Modified Diets

1. Given a list of disease processes requiring dietary modification, the student will be able to identify the appropriate therapeutic diet for each disease with 90% accuracy.
2. In written tests, the student will identify and explain the general purposes of diet therapy and the specific purposes or affects associated with each modified diet. The explanation should include details of how the Dietetic Technician can help the patient cope with the diet both at home and in the hospital.
3. Given a diet manual, regular menu, diet prescription, and sample diet history, the student plans attractive modification of the regular menu to meet the patient's needs and preferences.
4. In written tests, the student identifies and describes the role of the Dietetic Technician in the health care team, using specific examples of how the technician might work with at least three other members of the team.
5. Given a role playing situation and a diet history form, the student will practice obtaining dietary information from the patient, using correct interviewing and listening techniques.
6. Given sample case histories, the student will apply the SOAP format in writing sample entries for the patient's medical chart, with all information recorded in the correct categories.

#### FSS 1001 Orientation to Food Service

1. Given a list of food service systems, the student will state the probable uses and advantages and/or disadvantages for each system in institutions, health care fields, industry, and commercial food services.
2. Given written tests, the student will identify the required education, job opportunities, responsibilities and roles of the various food service career areas.
3. Given tours of various food service establishments, the student will accurately observe and record specific organizational and operational procedures within the facility. An overall evaluation will be included in the report.

4. In written tests, the student will identify major advancements, current problems, and common procedures and resource agencies within the food service industry.

#### FSS 1202C Foods

1. Given a fully equipped kitchen lab the student will demonstrate basic skills of food preparation by the correct use of lab equipment.
2. Given a fully equipped kitchen lab, the student will apply neat orderly work habits in food preparation to meet safety and sanitation standards. Skills in time and energy management will be evaluated.
3. Given a fully equipped kitchen lab, the student will prepare foods to have retention of nutrients, palatability and aesthetic appeal.
4. In written tests and in recipe selections, the students will select various foods according to particular characteristics, considering value to good health.

#### FSS 2221 Quantity Food Production

1. Given a quantity food lab, production schedule, and standardized recipes, the student will use the proper equipment and scientific procedures in the preparation of menu items. Each major piece of equipment and all portion control tools should each be used a minimum of two times and all sanitation and safety procedures must be followed.
2. Given written tests, the student will be able to identify management tools and terms used in quantity food production and service with 90% accuracy.
3. Given a menu and staffing limitations, the student will plan daily production schedules to serve quality food on time and in accurate quantities.
4. Given recipes and price information, the student will accurately cost a minimum of 10 recipes for food cost control, adjusting recipes for quantity if necessary.
5. Given a quantity food production setting, the student will supervise and evaluate food production and service, making any necessary managerial decisions and submitting a written evaluation of lab.

#### FSS 2100 Menu Planning and Food Merchandising

1. The student will plan menus for various types of food facilities and occasions, using the basic principals of menu planning.
2. Given menus and price information, the student will pre-cost the menus to develop selling prices with no more than two errors per menu.
3. Given written tests, the student will correctly identify and discuss the factors that influence the merchandising of food for customers in institutions and commercial food service facilities.
4. In lab experiences and in written reports, the student will demonstrate the ability to use merchandising techniques through menu presentations, food production and displays, advertising, public relations, and atmosphere.

#### FSS 2284 Catering

1. In written tests, the student will identify and discuss the requirements for establishing a catering business, including in the discussion at least five factors that should be considered.
2. Given written tests, the student will accurately identify and describe the procedures for purchasing, renting, or leasing catering equipment.
3. Given a budget and actual contract experiences, the student will prepare menus and foods for all types of special functions. Menus must be within budget and foods served rated as acceptable by the customers.
4. Given a menu, staff, and facilities, the student will plan and organize all the steps in serving a special function, including the personnel and scheduling.
5. Given either a simulated or actual catering event, the student will effectively direct the preparation and service of a banquet, tea, reception, or other special event.



#### FSS 2244( Convenience Foods

1. Given written tests, the student will identify and explain the physical plant and equipment requirements for fast food and convenience food systems.
2. Given a laboratory setting, the student analyses new food products to determine their quality, acceptability, and labor saving potential.
3. Given a laboratory setting, the student demonstrates proper techniques for final preparation and service of quality convenience foods.
4. Given written tests, the student lists and identifies efficiency and convenience foods and explains the latest preservation methods, including advantages and disadvantages associated with their use.

#### FDS 2201 Sanitation and Safety

1. In written tests, the student will identify and describe how micro-organisms and chemicals can infect or contaminate foods. The description should include probable origins of contaminants, foods affected, and symptoms of associated poisonings.
2. In written tests, the student will identify safe procurement, storage, preparation, holding, serving, and disposal procedures, including safe temperature zones with 95% accuracy.
3. In written tests, the student will describe personal hygiene practices that will ensure safe food and environment, including in the description the rationale behind such practices and consequences of their neglect.
4. In written tests, the student will identify current sanitation and safety regulations and the agencies that develop and enforce these regulations for the food service industry.
5. Given a sample food service setting, the student will plan an employee sanitation and safety inservice program for the facility. The program will include a minimum of five inservices, each with individual objectives, outline of program, teaching methods, and audio-visual materials used.



#### FSS 1401 Food Service Equipment

1. In written tests, the student will state and analyse the factors influencing the selection of equipment, including space requirements and cost factors.
2. Given sample layouts to evaluate, the student will then plan a food service layout which will include estimate of space requirements and efficient work flow diagram.
3. Given a food service laboratory setting, the student will demonstrate ability in the operation and care of equipment, following specific sanitation and safety rules.
4. Given a food service laboratory setting, the student will plan efficient methods for use and care of equipment for the preparation and serving of various foods. This will include a maintenance schedule for longevity of equipment.
5. In written tests, the student will describe the affects that technological advances have on the development of the food service industry, to include affects on control, profit, energy usage, quality, and space.

#### FSS 2300 Management Systems I

1. In written tests, the student will list and briefly explain the factors involved in cost control.
2. Given guidelines, the student will write procedures and prepare sample forms for receiving, storing, and issuing food and non-food supplies. Procedures and forms must be practical and student must demonstrate how forms would be used.
3. Given a layout design, the student will develop a practical plan for the arrangement of food and supplies in the storage room(s).
4. Given sample budgeting procedures and forms, the student will outline the procedures for planning a budget, including the identification and use of records to determine food, labor, supply, equipment, and operating expenses.
5. In written and oral tests, the student will identify and explain work simplification techniques and portion and waste control methods. One work simplification technique will be demonstrated in class.

### FSS 2305 Management Systems II

1. Given the proper forms and staffing requirements, the student will prepare time sheets, work schedules, and vacation schedules for employees in various types of institutions. Schedules must meet requirements and not exceed budget.
2. Given resource materials and a classroom setting, the student will prepare and conduct an inservice training program. A minimum of fifteen minutes and one A-V material are to be used.
3. Given menus and standardized recipes, the student will forecast labor, supply, and food production requirements for a given unit of time. Forecasts must be accurate to ± 10%.
4. Given guidelines, the student will set up an efficient recipe filing system and evaluate quantity recipe files and books.
5. Given guidelines, the student will develop a rating scale for standard product evaluation. The scale should incorporate a minimum of five defined characteristics and be easily interpreted by the class members.

### FSS 1312 Personnel Management

1. In written tests, the student will be able to identify and define management principals as they relate to food service.
2. In written tests, the student will describe methods of personnel recruitment, including a minimum of five sources for obtaining personnel.
3. Given guidelines, the student will use appropriate written, oral, and audiovisual methods of communication. This will include: role-playing to develop interview techniques; development of training programs to carry out food service activities; and writing of job analysis, descriptions, and specifications.
4. Given a sample employee morale problem, the student will develop a workable solution to the problem, including the appropriate labor policies and/or work simplification methods affecting food service.

#### FSS 2120 Purchasing

1. In written tests, the student will identify and explain the market factors that relate to food purchasing.
2. Given a quantity food lab setting and an actual or simulated incoming shipment of goods, the student will be able to accurately appraise foods in relation to standards, grades, and intended use.
3. Given various forms and records necessary for purchasing and control, the student will use these forms accurately with no more than one error per form.
4. Given guidelines, the student will write specifications for all types of food and non-food products with no more than one error per specification.
5. After viewing sample manuals, the student will develop a purchasing procedures manual for an actual or imaginary but defined food service institution, according to specific guidelines.

#### FSS 2930 Food Service Seminar

1. Given a list of current readings as resource material, the student will list and briefly explain five problems in the food service industry. The student will discuss reasons for these problems in class, supporting his discussion with appropriate references and observations.
2. From a given list of topics, the student will choose a topic to research more thoroughly in order to prepare both oral and written reports. The written report and oral class presentation must follow written guidelines provided.
3. The student will prepare a bibliography and/or file of resources for problem solving in the food service industry. This will include a minimum of ten local agencies and five national associations.

#### FSS 2210 Meal Planning and Table Service

1. Given an equipped kitchen laboratory, the student will plan, prepare, and serve meals that are well-balanced, attractive, and within a given budget.

2. Given an equipped kitchen laboratory, the student will demonstrate time management skills, scientific cookery skills, and ability to use lab equipment correctly, including correct use of table settings.
3. In written tests, the student will explain the aesthetic value of the table setting and identify and explain the individual responsibilities and correct procedures for various types of meal service.

#### FSS 2940 Supervised Practicum

NOTE: There are at present eleven different practicums that dietetic technician students can take. Since most of the actual practicums need to be revised, the following competencies are only a representative sampling of the competencies from several of the practicums.

1. Given a patient, patient's medical chart and necessary forms, the student will obtain and correctly evaluate pertinent dietary data (diet history) from patients.
2. Given the facility's regular menu and diet manual, the student will modify the menu for specific disease states and instruct the patients on the modification.
3. Given time to observe group of dietary employees, the student will develop appropriate materials for inservice presentations.
4. Given the policy and procedure manual and necessary forms, the student will procure and receive supplies following established procedures.
5. Given a tour of the practicum facility and a copy of the policy and procedure manual, the student will describe the organization of the dietary department and show its relationship to the entire facility. The description should include an organization chart.

## EMPLOYER EXPECTATIONS

A questionnaire about D.T. competencies was not sent to the members of the advisory committee or to area employers. Because this is a relatively new career area, there are no D.T. graduates employed as such in the immediate area. Presently, we are educating area dietitians and food service managers about the qualifications and education of D.T.'s in order to create a demand for our graduates that wish to stay in Pensacola.

The American Dietetic Association is presently working on defining the competencies in all areas of dietetics. Several studies have been conducted nationwide, and several position papers written on competencies for the dietetic technician and I used some of these as references in writing our course competencies.

To gain knowledge and feedback as to whether our graduates are meeting these competencies on the job, the following instrument could be sent to the employers of D.T. graduates for their evaluation of the PJC graduates' performance.



PENSACOLA JUNIOR COLLEGE  
DIETETIC TECHNICIAN GRADUATE EVALUATION

Graduate \_\_\_\_\_

Employer Name & Title \_\_\_\_\_

Is graduate working with title of Dietetic Technician? \_\_\_\_\_  
If no, then what is position title? \_\_\_\_\_

Please evaluate the PJC D.T. graduate in regard to his/her  
success in your department.

|                                                                                                   | <u>Inadequate</u> |   |   | <u>Satisfactory</u> |   |   | <u>Excellent</u> |   |   |    |
|---------------------------------------------------------------------------------------------------|-------------------|---|---|---------------------|---|---|------------------|---|---|----|
| 1. Prepares required records accurately and on time                                               | 1                 | 2 | 3 | 4                   | 5 | 6 | 7                | 8 | 9 | 10 |
| 2. Assumes responsibility for beginning and completing assignment                                 | 1                 | 2 | 3 | 4                   | 5 | 6 | 7                | 8 | 9 | 10 |
| 3. Displays a level of self-confidence corresponding to the level of knowledge and skill attained | 1                 | 2 | 3 | 4                   | 5 | 6 | 7                | 8 | 9 | 10 |
| 4. Respects and maintains confidentiality of the work situation                                   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7                | 8 | 9 | 10 |
| 5. Demonstrates ability to cooperate with others                                                  | 1                 | 2 | 3 | 4                   | 5 | 6 | 7                | 8 | 9 | 10 |
| 6. Demonstrates ability to clearly communicate with others, both verbal and in written form       | 1                 | 2 | 3 | 4                   | 5 | 6 | 7                | 8 | 9 | 10 |
| 7. Demonstrates a working knowledge of nutrition and patient care                                 | 1                 | 2 | 3 | 4                   | 5 | 6 | 7                | 8 | 9 | 10 |
| 8. Is able to assist in personnel function                                                        | 1                 | 2 | 3 | 4                   | 5 | 6 | 7                | 8 | 9 | 10 |
| 9. Is able to effectively plan and supervise meal service                                         | 1                 | 2 | 3 | 4                   | 5 | 6 | 7                | 8 | 9 | 10 |
| 10. Demonstrates ability to assist in overall management systems                                  | 1                 | 2 | 3 | 4                   | 5 | 6 | 7                | 8 | 9 | 10 |



## UTILIZATION PLAN

The utilization of the competencies involves four plans of action.

1. The course competencies will be used on a trial basis by instructors and students beginning in the fall of 1980.
2. Evaluative feedback will be obtained from students, faculty and employers for the purpose of adjusting and improving the competency statements, evaluative techniques, and instructional materials.
3. The competencies for the courses will be woven into a coherent self-instructional correspondence program. The activity is scheduled for completion in the summer of 1981.
4. Competencies will be expanded and specifically defined for the internship. The internship's development is to be completed by March 1981. The first interns are expected to begin in the fall of 1981.

PROGRAM: LEGAL ASSISTANT

PROGRAM MANAGER: B. NOWLIN KEENER, JR.  
DEPARTMENT OF BUSINESS ADMINISTRATION  
PENSACOLA JUNIOR COLLEGE

The Legal Assistant or Para-Legal is a relatively new member of the legal community. The first program was begun in only 1972 following a four-year American Bar Association study of the concept. In 1976, the Supreme Court of Florida, on petition of the Florida Bar, approved amendments to the Bar's Code of Professional Responsibility which cleared the way for Florida lawyers to fully utilize the service of trained legal assistants.

The two-year Legal Assistant Program leads to the Associate of Science degree. The student is required to complete 18 semester credits of diversified general education, 30 credits of specified core legal courses, and a specialty cluster of 12 credits in one of five optional fields of legal specialization: real estate, probate, litigation, commercial law and criminal law. Students may elect to complete more than one specialty area. Although no additional formal academic award is presently available to the student who completes multiple specialties, action is being taken to create multiple associate degree programs building upon the same general education and core courses.

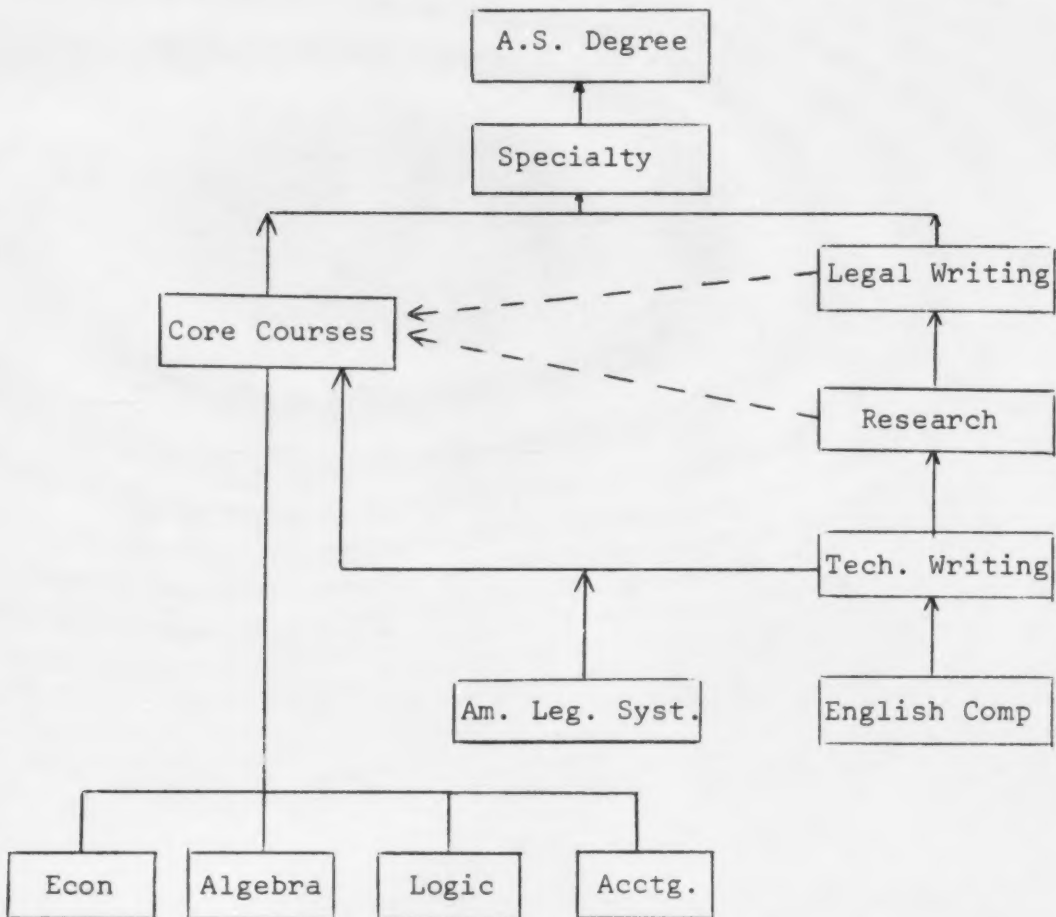
In addition to the five basic specialty clusters, a student has the option of working with the program manager to develop his/her own individualized specialty through directed independent study. Typical of such possibilities are Government Contracting, Hospital Law, and Educational Law.

Students acquire two distinct levels of job-entry competencies: their specialty clusters equip them to assist as various highly trained specialists while their ten core courses provide them all with sufficiently broad backgrounds to act as general legal assistants. A third level of competency is also available to those students who choose to complete all five of the specialty clusters. These latter will be qualified for employment on a long-term basis as Research Assistants and Law Clerks--jobs which heretofore have been almost exclusively performed on a short-term basis by recent law school graduates.

Teaching materials utilized in the program are drawn heavily from the upper division, law school publications and Bar practice manuals. The library collection supporting the Legal Assistant program includes:

|                             |                             |
|-----------------------------|-----------------------------|
| Florida Administrative Code | Words and Phrases           |
| Florida Statutes            | Restatements of the Law     |
| Florida Statutes, Annotated | U.S. Code Annotated         |
| Florida Jurisprudence       | Supreme Courts Reports      |
| Southern Reporter           | Supreme Court Digest        |
| Southern Digest             | U.S. Supreme Court Bulletin |
| Shepard's Southern Citator  | U.S. Law Week               |
| American Jurisprudence      | U.S.C.C. & A.N.             |
| Corpus Juris Secundum       | Shepard's Supreme Court     |
| American Law Reports        | Citator                     |

PROGRAM MAP: LEGAL ASSISTANT



## PROGRAM COMPONENTS

### General Education (18 Credits)

Although some latitude is permitted upon prior approval, the general education component consists of the following courses:

|          |                     |           |
|----------|---------------------|-----------|
| ENC 1103 | English Composition | 3 credits |
| ENC 1313 | Technical Writing   | 3         |
| MAC 1104 | Algebra             | 3         |
| ECO 1000 | Economics           | 3         |
| PHI 2100 | Logic               | 3         |
| ACC 2001 | Accounting          | 3         |

### Core Courses (30 Credits)

These courses are required of all Legal Assistant students regardless of their specialty area.

|          |                        |           |
|----------|------------------------|-----------|
| BUL 1001 | American Legal System  | 3 credits |
| LEA 1001 | Legal Research         | 3         |
| LEA 2014 | Legal Writing          | 3         |
| LEA 1004 | Contracts              | 3         |
| LEA 2106 | Criminal Law           | 3         |
| LEA 2101 | Litigation             | 3         |
| REE 2000 | Real Estate Principles | 3         |
| LEA 2211 | Probate                | 3         |
| BUL 2112 | Business Law II        | 3         |
| LEA 2501 | Domestic Relations     | 3         |

(BUL 1001 is a prerequisite to all LEA courses, and ENC 1103 and LEA 1001 are firm prerequisites to LEA 2014, Legal Writing.)

### Specialty Courses

Twelve credits are required in the specialty. Five specialty areas of four courses each have been developed and are listed below.

| <u>Litigation</u> |           | <u>Real Estate</u> |                          |
|-------------------|-----------|--------------------|--------------------------|
| LEA 2151          | Torts I   | LEA 2201           | Real Estate Law          |
| LEA 2104          | Pleadings | LEA 2202           | Real Estate Transactions |
| LEA 2102          | Torts II  | LEA 2105           | Real Estate Litigation   |
| LEA 2103          | Evidence  | LEA 2206           | Real Estate Closings     |

|          |                                 |          |                              |
|----------|---------------------------------|----------|------------------------------|
| LEA 2212 | Wills and Trusts                | LEA 2311 | Business Organization        |
| LEA 2215 | Estate Taxation                 | LEA 2312 | Bankruptcy                   |
| LEA 2214 | Estate Administration           | LEA 2313 | Administrative Law           |
| LEA 2216 | Estate Planning and<br>Drafting | LEA 2314 | Commercial Trans-<br>actions |

|          |                          |
|----------|--------------------------|
| LEA 2602 | Criminal Procedure       |
| LEA 2603 | Constitutional Questions |
| LEA 2604 | Forensic Science Survey  |
| LEA 2013 | Evidence                 |

#### Additional/Optional Courses

The following courses are optional and satisfy no requirements of the program, per se.

|          |                                                                                                    |
|----------|----------------------------------------------------------------------------------------------------|
| LEA 2401 | Law Office Procedures: An internship                                                               |
| LEA 2905 | Directed Individual Study: A mechanism<br>for specialties beyond the five<br>previously described. |
| LEA 2935 | Legal Seminar: Seminar presentations<br>and guest lectures                                         |

The prerequisites for entry into one of the specialty areas are BUL 1001, American Legal Systems, LEA 1001, Legal Research, and the particular specialty's corresponding core course.



## PROGRAM LEARNING OUTCOMES

### Legal Assistant: General Core

1. When given only a factual situation containing elements of a problem involving the specialty, the graduate shall be able 1) to analyze the problem, 2) to research the issues, and 3) to write an orderly, coherent memorandum of law.
2. When given a pre-analyzed problem in an area other than ones specialization and intermittant guidance, the graduate can effectively and efficiently use the traditional resources of the basic law library.
3. When having participated in the interview of a client with an uncontested domestic relations problem, or having been provided with the interview note, the graduate shall be able 1) to generally determine the proper jurisdiction and venue, 2) to draft for approval all necessary pleadings, 3) to schedule all court hearings, and 4) to conduct most follow-up interviews.
4. When given personal guidance in another area of legal practice, the graduate shall be able to perform routine tasks in the new area.
5. When permitted independent activity, the graduate shall recognize his/her limits and shall seek the proper guidance.
6. When employed, the graduate shall be capable of establishing and motivated to follow a comprehensive program of continuing education in his/her area of specialization.

### Specialty: Litigation

1. When given typical civil litigation proceedings and access to reference materials, the graduate shall be able 1) to determine the necessary procedural steps to be taken, and 2) to prepare tentative drafts of the indicated pleadings.
2. When given an active role in the assimilation and management of evidence, the graduate shall 1) recognize

the potentiality of the admissability of evidence, and 2) discuss the reasons for which it may be found either admissable or inadmissable.

Specialty: Criminal Law

1. When given factual situations involving various crimes, the graduate shall be able to determine the existance or absence of the individual elements.
2. When given a typical criminal proceeding and access to reference materials, the graduate shall be able 1) to determine the proper procedural steps, 2) to identify the appropriate Rules of Criminal Procedure, and 3) to prepare tentative drafts of the indicated written pleadings.
3. (See item 2. Specialty: Litigation above)

Specialty: Real Estate

1. When given moderately complex abstracts on Florida real property an access to reference materials, the graduate shall be able to prepare tentative title opinions and certifications error-free 75% of the time.
2. When given typical VA or FHA residential loan closings and sales transactions, and all necessary forms, table, etc., the graduate shall be able to prepare all necessary closing documents.
3. When given typical judicial proceedings involving real estate and reference materials, the graduate shall be able 1) to determine the requisite procedural steps and 2) to prepare rough drafts of the necessary pleadings.

Specialty: Probate

1. When given a testate or intestate estate and access to reference materials, the graduate shall be able 1) to determine and research the necessary procedural steps and 2) to prepare rough drafts of all necessary pleadings.

2. When given the factual situation of an estate with a potential estate tax liability and access to reference materials, the graduate shall be able to assimilate the necessary information and to prepare tentative Federal and State Estate Tax Returns.
3. When given a set of facts indicating a need for a clients advanced tax planning and access to reference materials, the graduate shall be able 1) to formulate a tentative estate plan, 2) to discuss the options, and 3) to prepare tentative drafts of all pertinent documents.

Specialty: Commercial Law

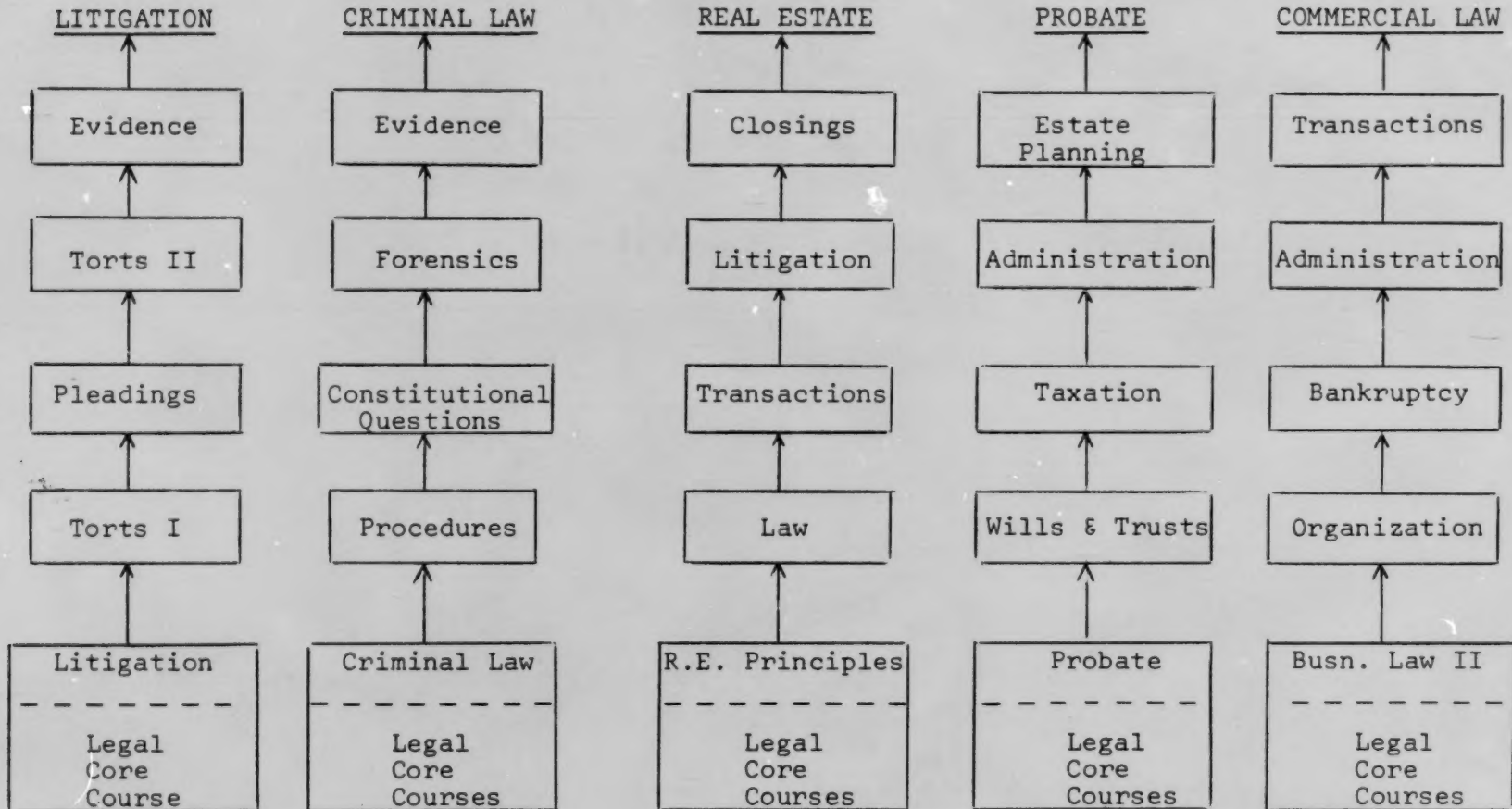
1. When given the specific's of a to-be-formal partnership or corporation, the graduate shall be able to prepare tentative drafts of all necessary documents.
2. When given access to standard forms, reference materials, and relevant facts pertaining to bankruptcy, the graduate shall be able to determine the necessary procedural steps and to prepare tentative drafts of the necessary pleadings.

Specialty: Research Assistant

1. The graduate shall demonstrate all of the individual specialty competencies.
2. When given a factual situation with the potential of a novel point of law, the graduate shall be able 1) to conceptualize the point of law and 2) to research and present a persuasive solution to the same.

PROGRAM MAP: SPECIALTY AND CORE

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LEARNING OUTCOMES: COURSES

BUL 1001 American Legal System - 3 Hours, 3 Credits

1. To extract the issues and relevant facts when given multiple appellate decisions, and to determine the resulting rules of law.
2. To chart the interrelationships of the various components of our state and federal judicial systems.
3. To chart the various pleadings, components and phases of a typical law suit's pre-trial, trial, and appellate stages.

LEA 1011 Legal Research - 3 Hours, 3 Credits

1. To provide with 95% accuracy contributing research when given a pre-analyzed problem not within his/her specialty and intermittent guidance and direction.
2. To analyze the nature of a problem within his/her specialty and to provide thorough and accurate research utilizing the basic law library.

LEA 2014 Legal Writing - 3 Hours, 3 Credits

1. To provide a research memorandum that is orderly, coherent, and free from grammatical errors.
2. To produce a trial memorandum pertaining to a point of law in his/her specialty that is orderly, coherent, and free from grammatical errors.

LEA 1004 Contracts - 3 Hours, 3 Credits

1. To extract the pertinent facts, issues, and rulings when given multiple appellate decisions involving this phase of law.
2. To discuss whether or not contracts exist when given various multiple factual situations.
3. To discuss the proper remedies when given multiple breach of contract situations.

LEA 2106 Criminal Law - 3 Hours, 3 Credits

1. (See item 1. Course LEA 1004)
2. To discuss the existence or absence of the individual elements when given multiple factual situations involving various crimes.

LEA 2101 Litigation - 3 Hours, 3 Credits

1. To identify the court to which the potential suit should be taken when given multiple sets of pertinent facts pertaining to cause-of-action, jurisdiction, venue, and relief.
2. To state and explain the general applicability of various forms of permissible discovery.
3. To locate within the Federal Rules of Civil Procedure the rules governing particular multiple Federal Court pleading situations.

REE 2000 Real Estate Principles - 3 Hours, 3 Credits

1. To identify and explain the various aspects and meanings of a standard real estate transaction.
2. To identify the most likely problems and errors in a standard real estate transaction.

LEA 2211 Probate - 3 Hours, 3 Credits

1. To explain the likely inheritance or descent when given multiple factual situations involving testate and intestate situations.
2. To state and explain the various probate procedures in the above.
3. To explain the potential death tax liabilities and the manner of determination when given simple estate situations.

BUL 2112 Business Law II - 3 Hours, 3 Credits

1. To recognize the potential interrelated basic problems involving agency, partnership, corporations, bankruptcy, insurance and sales.



LEA 2501 Domestic Relations - 3 Hours, 3 Credits

1. To prepare drafts and pleadings, to schedule hearings, and to conduct follow-up interviews after having access to interview information.
2. To recognize problems and conduct initial research when given multiple factual situations regarding causes-of-actions, jurisdiction, venue and relief, and when access is provided to research materials.

LEA 2401 Law Office Procedures - 3 Hours, 3 Credits

1. To be able to perform the routine tasks required in the law office.
2. To be able to perform progressively sophisticated tasks with minimal instruction and supervision.
3. To know the limits of his/her independent actions.

LEA 2151 Torts I - 3 Hours, 3 Credits

1. To be able to recognize from factual situations possibilities of common law, intentional torts or negligence actions.
2. To be able to explain the applicable rules in #1.
3. (See item 1, course LEA 1004)

LEA 2104 Pleadings - 3 Hours, 3 Credits

1. To determine the applicable procedural rules and their relative judicial interpretations when given problems involving Florida procedural law.
2. To prepare drafts of various pleadings when provided with research materials.

LEA 2102 Torts II - 3 Hours, 3 Credits

1. (See item 1, course LEA 1004)
2. To be able to recognize and explain the applicable rules of law when given factual situation involving possible negligence, statutory torts, and defenses.

LEA 2013 Evidence - 3 Hours, 3 Credits

1. To recognize unerringly the potential admissibility of evidence.
2. To be able to discuss any reasons for which evidence might be found admissible or inadmissible.

LEA 2602 Criminal Procedure - 3 Hours, 3 Credits

1. To determine the applicable procedural rules and their relative judicial interpretations when given a problem situation involving a criminal procedure.
2. To determine the proper procedural steps and the requirements for proper responses when given criminal situations.
3. To prepare tentative drafts of necessary pleadings.

LEA 2603 Criminal-Constitutional Questions - 3 Hours, 3 Credits

1. To recognize and to explain the applicable rules of law relating to constitutional questions involved in criminal proceedings.
2. To be able to extract the pertinent facts, issues and rulings when given multiple appellate decisions involving criminal-constitutional questions.

LEA 2604 Forensic Sciences Survey - 3 Hours, 3 Credits

1. To recognize the invisibility of utilizing forensic sciences when presented with situations involving criminal procedures.
2. To investigate independently and to research the potential evidentiary admissibility of certain forensic science procedures.

LEA 2202 Real Estate Transactions - 3 Hours, 3 Credits

1. To identify and explain various aspects and elements of standard real estate transactions.
2. To identify likely problems and errors involved in standard real estate transactions.

LEA 2201 Real Estate Law - 3 Hours, 3 Credits

1. To recognize the points of law and be able to apply the pertinent rules with respect to legal descriptions, deeds, estates in land, future interest, etc.
2. To conduct independent analysis and research, and to prepare a written memorandum of law pertaining to real property law.

LEA 2105 Real Estate Litigation - 3 Hours, 3 Credits

1. To recognize the points of law and to apply the pertinent rules of law regarding mortgage foreclosures, mechanic lien foreclosures, etc.
2. To determine the requisite procedural steps and prepared rough drafts of the necessary pleadings with respect to quiet title suits, mortgage foreclosures, mechanics lien foreclosures, etc.

LEA 2206 Real Estate Closings - 3 Hours, 3 Credits

1. To examine and prepare tentative title opinions and certifications when given abstracts on Florida real property and access to standard research materials.
2. To determine complete and prepare all necessary closing documents for a typical VA or FHA residential loan.

LEA 2212 Wills & Trusts - 3 Hours, 3 Credits

1. To identify the facts and to explain the applicable rules of law regarding wills, trusts, or related fiduciary relationships.
2. (See item 1. Course LEA 1004)

LEA 2215 Estate Taxation - 3 Hours, 3 Credits

1. To identify the facts and to state and explain the applicable rules of law relating to federal state-gift taxation.

2. To prepare a tentative federal estate tax return when given access to the necessary forms, tables and reference materials and a complete set of facts relating to the taxable estate.

LEA 2214 Estate Administration - 3 Hours, 3 Credits

1. To determine the necessary procedural steps and to prepare drafts of the pleadings and documents when given facts encompassing the need for administrations in both testate and intestate estates.
2. To prepare the necessary pleadings and documents relating to guardianship.

LEA 2216 Estate Planning & Drafting - 3 Hours, 3 Credits

1. To determine options available and to prepare written and verbal communications explaining the pros and cons on the various options with respect to the eventual disposition of an individual's wealth.
2. To prepare tentative drafts regarding wills and trusts when given access to the standard forms and reference materials.

LEA 2311 Business Organizations - 3 Hours, 3 Credits

1. To state and explain the applicable rules of law involving business relationships and organizations such as agencies, partnerships and corporations.
2. To prepare drafts of all necessary documents with respect to corporations and to-be-formed partnerships when given access to standard forms and reference books.
3. (See item 1. Course LEA 1104)

LEA 2312 Bankruptcy - 3 Hours, 3 Credits

1. To identify the legal issues and to state and explain the applicable rules of law related to bankruptcy and other forms of debtor of relief, and creditor's rights.
2. To determine the necessary procedural steps and to

prepare tentative drafts of the necessary documents and pleadings for common bankruptcy proceedings.

LEA 2313 Administrative Law - 3 Hours, 3 Credits

1. To recognize questions of administrative law and to explain applicable rules of law which relate.
2. (See item 1. Course LEA 1004)

LEA 2314 Commercial Transactions - 3 Hours, 3 Credits

1. To recognize legal questions concerning the Uniform Commercial Code and to state and explain the applicable rules of law.
2. (See item 1. Course LEA 1004)

## UTILIZATION PLAN

The Legal Assistant program shall be implemented through a process of a continually available general education component, and a continually available core component, with the specialization components being made available on a demand or rotational basis.

A specialty cluster shall be made available when a minimum of 15 students have met the prerequisites. The component will be offered primarily in the evening hours to accommodate the working student; the traditional daytime student may also enroll in the evening courses.

For specialties which are not currently formalized, the student may work directly with the program manager in a program of guided independent study. Examples of the independent study activities are: hospital law, educational law, and government contracting.

A yet to be developed follow-up instrument shall be used on a regular basis to determine the effectiveness of the training and the competency level of the graduate. The Advisory Committee shall be used to assist in the development. Competencies shall be listed and the measurement of the graduates performance shall be based upon these criteria. The survey instrument shall be directed to the attorney-employer; a modified version will be sent directly to the graduate. The program shall be refined and revised based on the feedback obtained from these surveys.



## BIBLIOGRAPHY OF COURSE MATERIALS

- BUL 1001 American Legal Systems  
The Dynamics of Law. Houghteling. (Harcourt. 1968)  
Black's Law Dictionary. (West. 1979)
- LEA 1011 Legal Research  
The Fundamentals of Legal Research. Jacobstein.  
(Foundation. 1977)  
Uniform System of Citations. Harvard Law Review  
Association. (Gannett. 1980)
- LEA 2014 Legal Writing  
Legal Writing Style. Weihofen. (West. 1980)
- LEA 1004 Contracts  
Cases on Contracts. Dawson and Harvey. (Foundation.  
1977)  
Contracts in a Nutshell. Schaber and Rohwer. (West.  
1975)
- LEA 2106 Criminal Law  
Criminal Law. Perkins and Boyce. (Foundation. 1977)
- LEA 2101 Litigation  
Civil Litigation. Paralegal Institute. (West. 1977)  
Torts in a Nutshell. Kionka. (West. 1977)  
Federal Rules. Law School Edition. (West. 1980)
- REE 2000 Real Estate Principles  
Florida Real Estate. Harwood and Thompson. (Prentice  
Hall. 1979)
- LEA 2211 Probate  
Wills, Trusts, and Estate Administrations. Hower.  
(West. 1979)
- BUL 2112 Business Law II  
Business Law. Anderson. (Southwestern. 1980)
- LEA 2501 Domestic Relations  
Florida Dissolution of Marriage. (Florida Bar. 1979)  
Support, Custody, Etc. in Florida. (Florida Bar.  
1978)  
Adoption, Praternity and Other Florida Family Prac-  
tices. (Florida Bar. 1979)
- LEA 2151 Torts I  
Cases On Torts. Prosser. (Foundation. 1976)  
Law of Torts, Hornbook. Prosser. (West. 1971)

- LEA 2104 Pleadings  
Florida Civil Practice Before Trial. (Florida Bar. 1975)  
Florida Civil Trial Practice. (Florida Bar. 1977)  
Florida Rules of Court. (West. 1980)  
Florida Appellate Practice. (Florida Bar. 1978)
- LEA 2102 Torts II  
Cases On Torts. Prosser. (Foundation. 1976)  
Law of Torts, Hornbook. Prosser. (West. 1971)  
Comparative Negligence and Contribution in Florida. (Florida Bar. 1977)
- LEA 2013 Evidence  
A Modern Approach to Evidence. Lempert and Saltzburg. (West. 1977)  
McCormick On Evidence, Hornbook. Cleary. (West. 1972)  
Evidence in Florida. (Florida Bar. 1978)
- LEA 2602 Criminal Procedure  
Florida Criminal Rules and Practice. (Florida Bar. 1979)  
Florida Rules of Juvenile Procedure. (Florida Bar. 1977)  
Federal Rules. (West. 1980)  
Florida Rules of Criminal Procedure. (Florida Bar. 1977)  
Florida Juvenile Law and Practice. (Florida Bar. 1979)
- LEA 2603 Criminal Constitutional Questions  
Constitutional Criminal Procedure. Scarboro and White. (Foundation. 1977, 1980 Supplement)
- LEA 2604 Forensic Sciences Survey  
Scientific Evidence in Criminal Cases. Moenssens and Inbau. (Foundation. 1978)
- LEA 2202 Real Estate Transactions  
Real Estate Transactions. Goldstein. (Foundation. 1980)
- LEA 2201 Real Estate Law  
Florida Real Estate Transactions. Boyer. (Matthew Bender. 1980)
- LEA 2105 Real Estate Litigation  
Florida Real Property Practice III. (Florida Bar. 1976)  
Florida Real Estate Transactions. Boyer. (Matthew Bender. 1980)

- LEA 2206 Real Estate Closings  
Florida Real Property Sales Transactions. (Florida Bar. 1978)  
Florida Real Estate Transactions. Boyer. (Matthew Bender. 1980)  
Real Property Title Examinations and Insurance in Florida. (Florida Bar. 1979)
- LEA 2212 Wills and Trusts  
Gratuitous Transfers. Clark. Lusky and Murphy. (West. 1977)
- LEA 2215 Estate Taxation  
Federal Estate and Gift Taxation. Stephens, Maxfield and Lind. (Warren, Gorham and Lamont)  
Federal Estate and Gift Taxation, Problems and Materials. Rice. (West. 1978)  
Federal Estate and Gift Taxes, Code and Regulations. (CCH. 1980)
- LEA 2214 Estate Administrations  
Basic Practice Under Florida Probate Code. (Florida Bar. 1976, 1977 Supplement)  
Rules of Probate and Guardianship Procedures. (Florida Bar. 1977)  
Florida Bar Probate System. (Florida Bar. 1979)  
Florida Guardianship Practice. (Florida Bar. 1978)  
Litigation Under Florida Probate Code. (Florida Bar. 1980)
- LEA 2216 Estate Planning and Drafting  
Planning and Drafting Wills and Trusts. Shaffer. (Foundation. 1979)  
Problems For Federal Estate and Gift Taxes. Kramer and Mc Cord. (West. 1976)  
Florida Will and Trust Drafting. (Florida Bar. 1977)  
Basic Estate Planning in Florida. (Florida Bar. 1980)
- LEA 2311 Business Organizations  
Enterprise Organizations. Conrad. (Foundation. 1977)  
Florida Basic Corporate Practice. (Florida Bar. 1977)
- LEA 2312 Bankruptcy  
Debtor and Creditor Law. Warren and Hogan. (Foundation. 1974)  
Creditors' and Debtors' Rights in Florida. (Florida Bar. 1979)
- LEA 2312 Administrative Law  
Legislative and Administrative Practice. Linde and Bunn. (Foundation. 1976)

- LEA 2313 Administrative Law (Continued)  
Florida Administrative Practice. (Florida Bar. 1978)
- LEA 2314 Commercial Transactions  
Commercial Law. Farnsworth and Honnold. (Foundation.  
1976)  
Introduction to Commercial Transactions. Braucher  
and Riegert. (Foundation. 1979)

PROGRAM: MANAGEMENT

PROGRAM MANAGER: GARY R. GAGE  
DEPARTMENT OF BUSINESS ADMINISTRATION  
PENSACOLA JUNIOR COLLEGE

The two-year Associate of Science Business-Management program is designed to develop the capacity of individuals to support the decision making functions of management that involve planning, organizing, implementing, staffing, and controlling. The graduate should be able to enter and successfully compete in a variety of management positions in such industries as manufacturing, banking, merchandising, transportation, insurance, communications, utilities, and government service work. The program provides education that will fit the student to employment as a junior executive, supervisor, foreman, proprietor or partner of their own business.

Examples of positions are as follows:

|                             |                                |
|-----------------------------|--------------------------------|
| Accountant/Bookkeeper       | Personnel Interviewer          |
| Advertising Account Manager | Personnel Mgr's Assistant      |
| Bank Trainee/Teller         | Purchasing Agent               |
| Claims Adjuster             | Restaurant Manager             |
| Credit Manager              | Specialty Store Salesman       |
| Insurance Agent             | Union Business Agent           |
| Hotel/Motel Management      | Newspaper Reporter             |
| Inventory Supervisor        | Theater Manager                |
| Investment Banker           | Travel Bureau Manager          |
| Job Analyst                 | Variety Store, Dept. Manager   |
| Labor Relations Specialist  | Department Store, Mgr. Trainee |
| Manufacturer's Sales Rep.   |                                |

## Freshman Year

### Term I

|          |                          |       |
|----------|--------------------------|-------|
| GEB 1011 | Introduction to Business | 3 cr. |
| ENC 1103 | English Composition      | 3     |
| ECO 1000 | American Economy         | 3     |
| MAN 1200 | Personnel Management     | 3     |
| MAC 1104 | College Algebra          | 3     |

### Term II

|                     |                   |   |
|---------------------|-------------------|---|
| MAN 2000            | Management        | 3 |
| ENC 1313            | Technical Writing | 3 |
|                     | Social Studies    | 3 |
| <del>STA 2014</del> | Statistics        | 3 |
| SPC 1300            | Speech            | 3 |

## Sophomore Year

### Term I

|          |                        |   |
|----------|------------------------|---|
| MAN 2100 | Human Relations        | 3 |
| BUL 2402 | Government Regulations | 3 |
| COC 1300 | Computers              | 3 |
| ACC 2001 | Accounting I           | 3 |
| — —      | Business Elective      | 3 |

### Term II

|          |                                    |   |
|----------|------------------------------------|---|
| MAN 2530 | Operations Management              | 3 |
| MAC 2233 | Math with Business Applications    | 3 |
| FIN 2000 | Principles of Finance              | 3 |
| ACC 2021 | Accounting II or Business Elective | 3 |
| MAN 2930 | Management Actions                 | 3 |



Key: Program Map

|                                 |                                              |
|---------------------------------|----------------------------------------------|
| GEB 1011 - Intro. to Business   | BUL 2402 - Gov't. Regulations                |
| ENC 1103 - English Composition  | COC 1300 - Computers                         |
| ECO 1000 - Am. Economy          | ACC 2001 - Accounting I                      |
| MAN 1200 - Personnel Mgt.       | BAN 2210 - Analyzing Financial<br>Statements |
| MAC 1104 - Col. Algebra         |                                              |
| AMH 1550 - Am. Constitution     | MAN 2530 - Production Mgt.                   |
| MAN 2000 - Princ. of Management | QMB 1030 - Decision Theory                   |
| ENC 1313 - Tech. Writing        | CNM 2002 - Math for Computers                |
| STA 2014 - Statistics           | ACC 2021 - Accounting II                     |
| SPC 1300 - Speech               | MAN 2930 - Management Actions                |
| MAN 2100 - Human Relations      | SOS ---- - Elective                          |

## Program Map



Learning Outcomes: Business Administration Management Program

1. A graduate will have developed a vocabulary of business terminology. This competency is measured in all of the core courses required for the management degree.
2. A graduate will be able to identify vocations and career areas of personal interests related to specific job classifications. This competency will be measured in all core courses and GEB 1011.
3. A graduate will be able to apply for career level employment and submit the appropriate preliminary employment documents; i.e., letters of application and resume, which must be compiled according to the instructors checklist. This competency is measured in MAN 1200 and MAN 2000.
4. Given management case problems, a graduate will be able to demonstrate, with 90% accuracy, the ability to coordinate a business's output policy and that company's workforce as a major factor of production. This competency will be measured in MAN 2000, MAN 2100, and MAN 2530.
5. Given simulated management games, a graduate will be able to demonstrate, with 85% accuracy, the ability to compete with other simulated businesses representing a market place in terms of a product, distribution, promotion, and pricing. This competency will be measured in MAN 2930.
6. The graduate will be able to identify the basic form and size of business that he desires employment, given the characteristics of the proprietorship, partnership, and corporate forms of business organization. This competency is measured by all of the core courses required for the management degree and GEB 1011.

Learning Outcomes: Business Administration Management - Required Core Courses

Personnel Management - MAN 1200

The student will:

1. Describe the socio-economic climate of the informal and formal organization involving employment.
2. Construct a letter of application for employment and compile a resume.
3. Apply the rules of equal opportunity selection and hiring practices.
4. Identify the various types of labor union affiliations for employees.
5. Develop a philosophy of wage and fringe benefit compensation.

Principles of Management - MAN 2000

The student will:

1. Distinguish between the types of management plans and know when to apply each to various business situations.

2. Name the steps in organization of work.
3. Describe the techniques of directing such as training, performance, rating, and providing work incentives.
4. Identify the methods of controlling worker output.

Human Relations - MAN 2100

The student will:

1. Demonstrate the ability to get along and maintain harmonious relations with other people in the business world.
2. Gain insight into the behavior of others through the application of psychological principles.

Production Management - MAN 2530

The student will:

1. Demonstrate work simplification methods.
2. Analyze motion and time studies.
3. Construct work flow diagrams.
4. Describe production systems of routing, scheduling, dispatching, shipping, receiving, and warehousing.

Management Actions - MAN 2930

The student will:

1. Apply the factors of production, marketing, and finance to a simulated business game.
2. Participate on a team for a simulated business that is in competition with other classroom teams for the best productive output and marketing results.

Worker Expectation Form: Business Administration - Management Program

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Person Interviewed: \_\_\_\_\_

Graduate: \_\_\_\_\_

Does the Job Require the Employee in this Company to:

|                                                                                 | Very Necessary | Necessary | Desirable | Un-necessary | Non-applicable |
|---------------------------------------------------------------------------------|----------------|-----------|-----------|--------------|----------------|
| 1. Use initiative in carrying out duties                                        |                |           |           |              |                |
| 2. Change work priorities                                                       |                |           |           |              |                |
| 3. Influence people' attitudes                                                  |                |           |           |              |                |
| 4. Influence people's opinions about work and the company                       |                |           |           |              |                |
| 5. Analyze problems when procedures or systems break down                       |                |           |           |              |                |
| 6. Be precise in execution of exact detail or stick to policy and job standards |                |           |           |              |                |
| 7. Use imagination and confidently tackle problems                              |                |           |           |              |                |
| 8. Accept close direction from immediate supervisor                             |                |           |           |              |                |
| 9. Assume responsibility for new decisions without passing the buck             |                |           |           |              |                |
| 10. Have patience in performing routine and repetitive work                     |                |           |           |              |                |
| 11. Get work completed at a fast pace for self and for setting pace for others  |                |           |           |              |                |
| 12. Get enthusiasm and interest from others about taking actions                |                |           |           |              |                |
| 13. Avoid distractions to provide efficiency of completed work                  |                |           |           |              |                |
| 14. Delegate job tasks to others for completion                                 |                |           |           |              |                |

|                                                                                                     | Very Necessary | Necessary | Desirable | Un-necessary |
|-----------------------------------------------------------------------------------------------------|----------------|-----------|-----------|--------------|
| 15. Willingness to work steadily and in harmony with others doing the same or related kinds of work |                |           |           |              |
| 16. Plan for follow-up and inspection of delegated work                                             |                |           |           |              |
| 17. Explain job expectations to subordinates                                                        |                |           |           |              |
| 18. Develop alternative actions by trial and error method                                           |                |           |           |              |
| 19. Develop potential in subordinates through job coaching                                          |                |           |           |              |
| 20. Maintain composure in high pressure or stress situations                                        |                |           |           |              |
| 21. Listen to others                                                                                |                |           |           |              |
| 22. Respond to job action when structure or supervisor is not present                               |                |           |           |              |



### A Plan for Utilization of the Product

As a primary instructor of the Management Courses and Introduction to Business I am in a better position to help counsel students as they search for answers to questions about required courses for a degree in management. Also, what their course will mean in relation to on-the-job requirements upon applying for and securing employment.

The program map is an excellent visual aid that presents a logical look at what courses should be taken first, second, third, etc., and where the student should be at a certain point in time relative to graduation and educational requirements for full time employment. The program map also provides the student flexibility in what courses can be taken term by term so that they may have their choice of departmental schedule days, nights, times, instructors, and mode of course offering.

Programs: Marketing and Marketing (wholesale emphasis)

Program Manager: Francis Scott Key, Jr.  
Department of Business Administration

The Marketing programs at Pensacola Junior College are designed to train the student to enter business at beginning positions in (1) selling, (2) buying, and (3) marketing management. In addition, each program offers enough flexibility to prepare the student for possible advancement opportunities within the field of marketing.

#### MARKETING A.S.

##### First Year

| TERM I   |                    |       | TERM II  |                    |       |
|----------|--------------------|-------|----------|--------------------|-------|
| GEB 1011 | Business           | 3 cr. | MAR 1101 | Salesmanship       | 3 cr. |
| ENC 1103 | English Comp.      | 3     | SES 1100 | Beginning Typing   | 3     |
| --- ---- | Social Science     | 3     | ENC 1136 | English Comp.      | 3     |
| MKA 2202 | Retailing          | 3     | MAR 2011 | Marketing          | 3     |
| --- ---- | Math               | 3     | COP 1170 | Programming        | 3     |
| BSC 1030 | Biology            | 3     | --- ---- | Humanities         | 2     |
| --- ---- | Physical Education | (1)   | --- ---- | Physical Education | (1)   |
| <hr/>    |                    |       | <hr/>    |                    |       |
| 18 cr.   |                    |       | 17 cr.   |                    |       |

##### Second Year

| TERM I   |                      |       | TERM II  |                    |       |
|----------|----------------------|-------|----------|--------------------|-------|
| ACC 2001 | Accounting           | 3 cr. | ACC 2021 | Accounting         | 3 cr. |
| ECO 2013 | Economics            | 3     | ECO 2023 | Economics          | 3     |
| BUL 2111 | Business Law         | 3     | MAN 2000 | Management         | 3     |
| COM 2100 | Busn. Communications | 3     | --- ---- | Physical Education | (1)   |
| MAR 2302 | Advertising          | 3     | BUL 2112 | Business Law       | 3     |
| --- ---- | Physical Education   | (1)   | MAN 2930 | Management Action  | 3     |
| <hr/>    |                      |       | <hr/>    |                    |       |
| 15 cr.   |                      |       | 15 cr.   |                    |       |

MARKETING A.A.  
WHOLESALE EMPHASIS

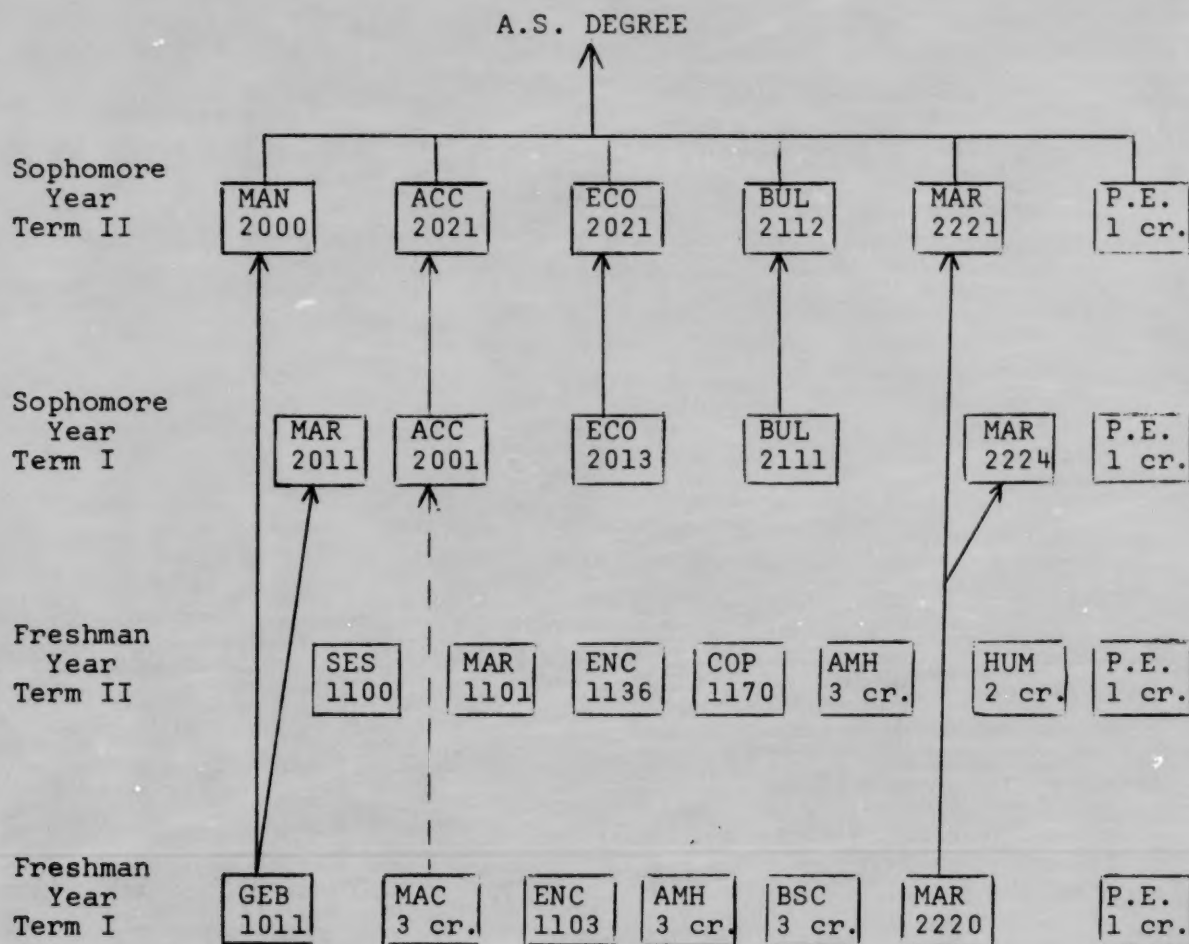
First Year

| TERM I   |                          |       | TERM II  |                          |       |
|----------|--------------------------|-------|----------|--------------------------|-------|
| GEB 1011 | Business                 | 3 cr. | MAR 1101 | Salesmanship             | 3 cr. |
| ENC 1103 | English Comp             | 3     | SES 1100 | Beginning Typing         | 3     |
| ---      | ----- Social Science     | 3     | ENC 1136 | English Comp.            | 3     |
| MAR 2220 | Wholesaling              | 3     | ---      | ----- Social Science     | 3     |
| MAT 0013 | Math                     | 3     | COP 1170 | Programming              | 3     |
| BSC 1030 | Biology                  | 3     | ---      | ----- Humanities         | 2     |
| ---      | ----- Physical Education | (1)   | ---      | ----- Physical Education | (1)   |
| <hr/>    |                          |       | <hr/>    |                          |       |
| 18 cr.   |                          |       | 17 cr.   |                          |       |

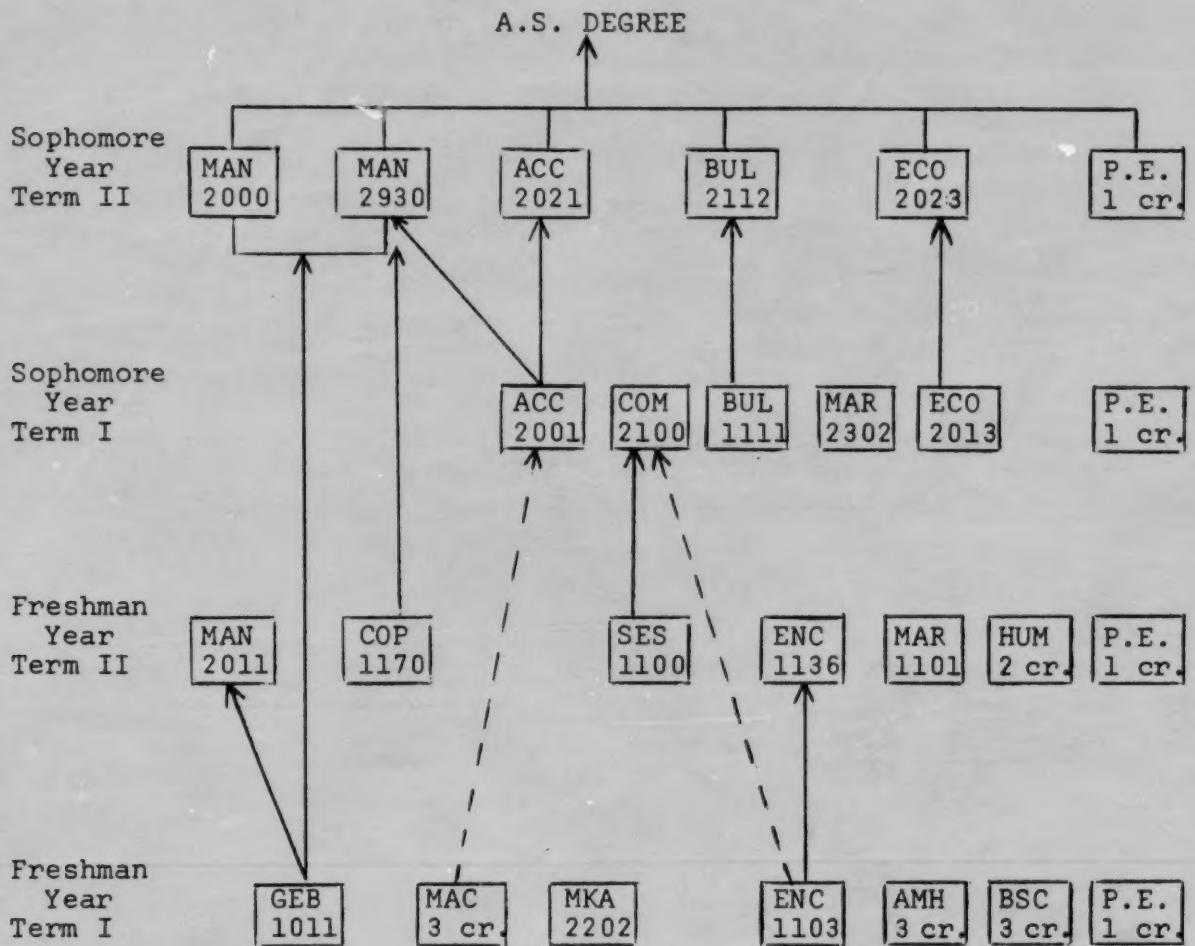
Second Year

| TERM I   |                          |       | TERM II  |                          |       |
|----------|--------------------------|-------|----------|--------------------------|-------|
| ACC 2001 | Accounting               | 3 cr. | ACC 2021 | Accounting               | 3 cr. |
| ECO 2013 | Economics                | 3     | ECO 2023 | Economics                | 3     |
| BUL 2111 | Business Law             | 3     | BUL 2112 | Business Law             | 3     |
| MAR 2224 | Warehouse Management     | 3     | MAN 2000 | Management               | 3     |
| MAR 2011 | Marketing                | 3     | MAR 2221 | Wholesale Management     | 3     |
| ---      | ----- Physical Education | (1)   | ---      | ----- Physical Education | (1)   |
| <hr/>    |                          |       | <hr/>    |                          |       |
| 15 cr.   |                          |       | 15 cr.   |                          |       |

# PROPOSED MARKETING (WHOLESALE EMPHASIS) PROGRAM MAP



# PROPOSED MARKETING PROGRAM MAP



## LEARNING OUTCOMES

### MARKETING PROGRAMS

1. The student will be able to evaluate the general market before selecting a specific target market for an organization. The target market selected must compliment the image of the retail store and the brands of products offered by the retailer.
2. When placed in a selling situation, the student will be able to give a complete sales presentation to any customer and establish contact with any customer, in the future, at all times.
3. The student will be able to organize a sales promotion campaign that will attract the target customers for any retail store. The sales promotion campaign must support the sales personnel and generate an additional flow of target customers into the retail store.
4. The student will be able to organize an advertising campaign that will compliment the social and economic images of a retailer's target market. The advertising campaign must get the retailer's customers into the store.
5. The student will be able to calculate the break-even point in dollar sales and in units sold when determining at what point the organization will start making a profit. 100% accuracy is required.
6. The student will be able to organize pricing policies that will benefit the seller and encourage the target customers to patronize the store. The pricing policies must be legal, compliment the economic image of the target market, and provide the seller with a profit.

## LEARNING OUTCOMES

### MARKETING COURSES

#### MAR 1101 - Salesmanship

1. Given six (6) cases in selling, the student will be able to explain the influences behind most consumer purchasing. The explanation must include the impact of the self-concept, economic, and emotional motives.
2. Given six (6) cases in selling, the student will be able to describe the types of closing techniques used in each case. An explanation as to why a particular closing technique was best must be given.
3. The student will be able to give three (3) complete sales presentations and the product must be brought to class (when applicable). The student must demonstrate the following:
  - (a) acceptable personal characteristics
  - (b) product knowledge
  - (c) avoidance of errors
  - (d) self-confidence
  - (e) overcome objections



- (f) attention, interest, and action
- (g) an effective close

Each presentation must last at least 25 minutes.

#### MAR 2011 - Marketing

1. Given six (6) marketing cases, the student will be able to describe potential target markets and their impact in selected market situations. The selections must be supported by an explanation of the market segmentation processes.
2. Given six (6) marketing cases, the student will be able to describe the following three categories:
  - (1) classification of products
  - (2) channels of distribution
  - (3) promotion blends

The description of each category must be supported with an explanation.

3. Given six (6) situations in pricing and the formulas for break-even point, the student will be able to calculate break-even point and construct a break-even chart for each situation. All break-even points must be calculated and charted correctly. Each chart must show the following:
  - (a) profit area
  - (b) loss area
  - (c) break-even point
  - (d) total cost curve
  - (e) total revenue curve

4. Given solutions to six (6) pricing situations, the student will be able to explain the best pricing alternative and tell why it was selected by using break-even charts

#### MKA 2202 - Retailing

1. Given five (5) retailing cases, the student will be able to describe potential target markets and explain their impact in selected retailing situations. The selection must be supported with an explanation of the market segmentation processes.
2. Given the steps in a retail business plan, the student will be able to create a retail business (on paper). The findings must be submitted in a typed report and orally defended.

#### MAR 2302 - Advertising

1. Given five (5) cases in advertising, the student will be able to describe potential target markets and explain their impact in selected advertising situations. The selections must be supported by an explanation of the market segmentation processes.

2. Given five (5) cases in advertising, the student will be able to tell why the push and pull strategies were used. Separate explanations for each of the strategies are required.
3. The student will be able to prepare a promotion package for a product or a retail store. The package must be submitted in a typed report and orally defended.

MAR 2220 - Introduction to Wholesaling

1. The student will be able to explain the benefits of the wholesale functions to the manufacturers and the retailers. Examples of the functions must be used to support the explanations.
2. Given four (4) wholesaling cases, the student will be able to apply the wholesale functions to relevant wholesale situations. The functions must be 100% applicable to the given situations.

MAR 2221 - Wholesale Management

1. The student will be able to apply an acceptable procedure in developing and servicing new and existing wholesale channels. An explanation to support the procedure is required.

MAR 2224 - Warehouse Management

1. Given six (6) simulated situations, the student will be able to explain and apply acceptable procedures involving the following:
  - (a) inventory control
  - (b) receiving
  - (c) distribution
  - (d) making claims

The student must tell why each procedure is best for each situation.

2. Given a floor plan of a warehouse and a numbering system, the student must be able to stock merchandise in an acceptable sequence and must be able to retrieve any piece of merchandise from the warehouse within 15 minutes.

# SKILL RATING SHEET

Marketing and Marketing  
with Wholesale Emphasis

Name of Occupation \_\_\_\_\_

Location \_\_\_\_\_

Person Interviewed \_\_\_\_\_

by: Francis Scott Key, Jr.

Employer \_\_\_\_\_ Graduate \_\_\_\_\_

|                                                     | Necessary | Desirable | Un-necessary | N/A |
|-----------------------------------------------------|-----------|-----------|--------------|-----|
| Does this job require the employee to:              |           |           |              |     |
| 1. Verify the receiving and shipping of merchandise |           |           |              |     |
| 2. Prepare purchasing and inventory control reports |           |           |              |     |
| 3. Give sales presentations (inside or outside)     |           |           |              |     |
| 4. Perform accounting procedures                    |           |           |              |     |
| 5. Project sales forecast                           |           |           |              |     |
| 6. Prepare a sales promotion campaign               |           |           |              |     |
| 7. Prepare an advertising campaign                  |           |           |              |     |
| 8. Use break-even analysis                          |           |           |              |     |
| 9. Prepare pricing policies                         |           |           |              |     |
| 10. Develop strategies to attract new markets       |           |           |              |     |
| 11. Develop strategies to maintain existing markets |           |           |              |     |
| 12. Verify the selling of merchandise               |           |           |              |     |
| 13. Verify the exchange/return of merchandise       |           |           |              |     |
| Any additional behaviors you may require:           |           |           |              |     |
| 14.                                                 |           |           |              |     |
| 15.                                                 |           |           |              |     |
| 16.                                                 |           |           |              |     |
| 17.                                                 |           |           |              |     |

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## THE UTILIZATION PLAN

In order for the marketing programs (plans) to be totally utilized, additional promotion is essential.

The three most viable methods of acquiring total utilization of the marketing programs are through the media (in forms of college publicity and brochures), counselors, and, of course, the instructors.

These methods are necessary in educating the students and potential students about a planned program in marketing. For the first time, the students will not only be able to get a consistent program of study to follow but also a much clearer understanding of the program content, the individual course content, and what is expected of him/her as a student. This educating process can be done before the students register for their first course in either of the marketing programs.

Once this information is made available to the students, their attitudes and behavior are most likely to change for the better.

REFERENCES OBTAINED THROUGH  
THE FLORIDA RESOURCES IN EDUCATION EXCHANGE

- ED156857      CE017039  
Marketing and Disbtributive Education. General Retail  
Merchandising Curriculum Guide. (Northern Illinois  
University)
- ED156858      CE017040  
Marketing and Distributive Education. Wholesaling  
Curriculum Guide. (Northern Illinois University)
- ED156859      CE017041  
Marketing and Distributive Education Curriculum Planning  
Guide. (Northern Illinois University)
- ED156860      CE017042  
Marketing and Distributive Education. General Marketing  
Curriculum Guide. (Northern Illinois University)
- ED156861      CE017043  
Marketing and Distributive Education. Food Marketing  
Curriculum Guide. (Northern Illinois University)

PROGRAM: PARAMEDIC TECHNOLOGY

PROGRAM MANAGER: VICKI GARLOCK, RN, BSN, EMT  
DEPARTMENT OF ALLIED HEALTH  
PENSACOLA JUNIOR COLLEGE

Upon completion of the one-year Paramedic Program, the graduate receives a Certificate of Occupational Competency and is eligible to sit for the Florida state certification examination.

The paramedic is trained to recognize the need for and provide emergency care under physician supervision for minor and life-threatening illness or injury in the pre-hospital setting. Attributes developed in the program include the ability to relate well with patients and health team members, calm, reasoned judgment, and an orientation toward service.

Following certification, graduates may begin employment as a Paramedic with:

- Ambulance Service/Rescue Squad
- Industrial Rescue Squad
- Hospital Emergency Department
- First Aid Stations
- Air Ambulance Services

With additional on-the-job training, paramedics could qualify for:

- Mobile neonatal units
- Hospital Coronary Care Units (Cardiac Technician)



On the following page is a map of the existing Paramedic Program. Changes are not anticipated presently, as Florida EMS Educators are devising an A.S. Degree program that, hopefully, will be endorsed as a standard for Florida by our governing and certifying agency (DHRS - EMS Section). This 2-year program plans to encompass EMT (Emergency Medical Technician) and Paramedic training and will be designed so that exit as a basic EMT eligible for certification will be facilitated. When this program is available, I anticipate a drastic change in our map.

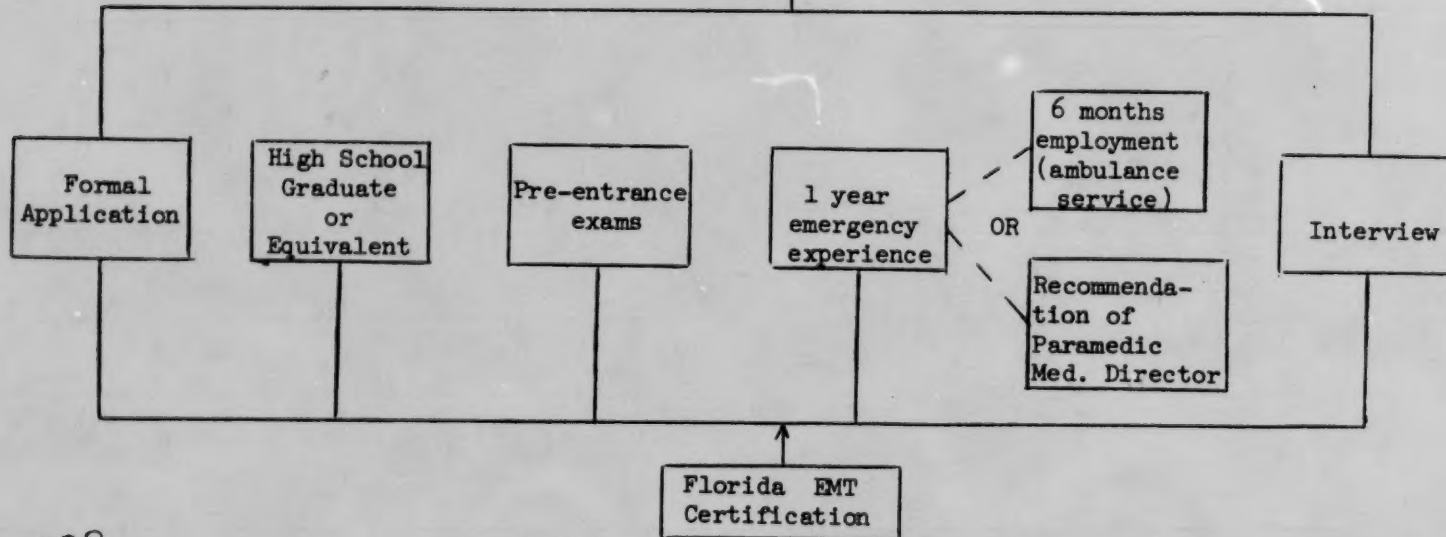
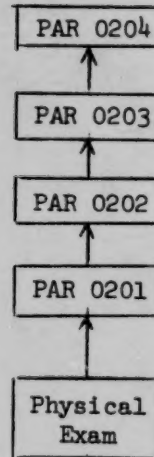
# PARAMEDIC TECHNOLOGY

## PROGRAM MAP

### SEQUENCE:

- PAR 0201 - Intro to Paramedic Role, Patient Assessment, Fluid/Shock (5 Technical Credits)
- PAR 0202 - Pharmacology, Respiratory Emergencies (5 Technical Credits)
- PAR 0203 - Cardiology, Management of CNS, Soft Tissue and Musculoskeletal emergencies (12 Technical Credits)
- PAR 0204 - Medical, OB/GYN, Pediatric Emergencies, Telemetry, Triage, Emotional emergencies (12 Technical Credits)

NOTE: All courses include clinical experience



### MAJOR LEARNING OUTCOMES

1. Placed in a real or simulated situation, the paramedic student will recognize the existence of a medical emergency, assess the situation recognizing hazards, and coordinate efforts tactfully with those agencies who may be involved in the care and transportation of the patient(s).
2. Placed in a real or simulated situation, the paramedic student will make an appropriate patient assessment, assigning priorities of emergency treatment, and record and communicate data to the base station/hospital or responsible physician using appropriate medical terminology.
3. Placed in a real or simulated situation, the paramedic student, using telecommunications, will:
  - a. initiate emergency treatment for such conditions as life-threatening arrhythmias, airway problems, shock, trauma, emotional crises
  - b. assess and report patient's response to treatment and modify treatment under physician direction
  - c. light packaging of patient and extrication
4. Given a situation, real or simulated, in which telecommunications are unavailable, the paramedic student will function under standing orders (protocols) and exercise personal judgment based on standard practice in treating or stabilizing the patient.
5. Given a real or simulated situation the paramedic student will select the best available method(s) of transport for the patient with approval of the supervising physician.
6. Given real or simulated situations, the paramedic student will record in writing appropriate details of the situation, the extent of injuries, and emergency care provided using appropriate medical terminology.
7. Given the necessary items, the paramedic student will direct the preparation, testing, and maintenance of emergency care equipment and supplies.

PAR 0201 - LEARNING OUTCOMES

1. Placed in a real or simulated situation involving legal aspects of emergency care, the student will recognize the existence of a liability situation, and exercise his judgment (based on laws, rules, and regulations that govern the actions of paramedics) in the management of the situation with 80% accuracy. Documentation on patient record in appropriate terms is required for completion.
2. Given a real or simulated situation and the necessary equipment, the student will demonstrate with 95% accuracy the procedure for:
  - a. eliciting a medical history
  - b. conducting a primary/secondary physical examination
  - c. transfer of information using appropriate medical terminology to the supervising physician or on patient record
3. Given a real or simulated patient with illness or injury, the student will identify the involved body parts using appropriate medical terminology and directional terms. Involved systems may include:
  - a. musculoskeletal
  - b. respiratory
  - c. circulatory
  - d. nervous
  - e. digestive
  - f. endocrine
  - g. genitourinary
4. Given the necessary equipment and real or simulated patients presenting with the signs/symptoms of the condition(s) listed below, the student will identify the condition represented and provide the appropriate therapy based on the accepted standard of care presented in this course:
  - a. dehydration
  - b. overhydration
  - c. hypovolemic shock
  - d. cardiogenic shock
  - e. low-resistance shock

Results of history and physical exam and all therapy must be documented on patient record in appropriate terms for completion.

5. Given real or simulated situations and the necessary equipment, the student will recognize the indications for, select the appropriate fluid for, and demonstrate with 95% accuracy, the aseptic technique for peripheral venipuncture/infusion therapy using an over-the-needle catheter, winged infusion device, intracath, and straight needle. The final IV site will be safe and stable as specified in the IV procedures. The drip rate will be calculated to  $\pm 2$  drops. Therapy must be documented in appropriate terminology on patient record for completion.
6. Given real or simulated situations, the student will recognize and provide appropriate intervention for a non-functioning IV according to the procedure manual with 95% accuracy.
7. Given real or simulated situations, the student will recognize indications/contraindications for and demonstrate with 95% accuracy the preparation, application, inflation, and deflation of the medical anti-shock trousers. Anatomical landmarks for application and inflation pressure of suit must be accurate. Blood pressure monitoring may or may not be simulated, depending on situation used.

PAR 0202

1. Given a real or simulated doctor's order for a drug dosage and the appropriate labeled medicine container, the student will calculate the dosage using appropriate apothecary or metric equivalents with 100% accuracy.
2. Given a real or simulated situation and the necessary equipment, the student will demonstrate with 95% accuracy (based on procedure manual) the aseptic technique for withdrawal of solution from ampoule/vial, use of pre-loaded syringe, administration of intravenous medication, addition of medication to IV bag, changing IV bags. Documentation on patient record in appropriate terms where applicable.
3. Given a real or simulated patient, the student will demonstrate with 95% accuracy (based on procedure manual) the aseptic technique for



administering intramuscular or subcutaneous injections. Dosages drawn into syringe must be 100% accurate. Anatomical landmarks must be established and palpated. Aspiration must precede injection of solution. Documentation on patient record in appropriate terminology is required for completion.

4. Given real or simulated situations and the necessary equipment, the student will demonstrate physical assessment, recognize presence of condition(s) listed below (based on established signs/symptoms) and provide appropriate therapy based on the accepted standard of care with 95% accuracy:
  - respiratory insufficiency
  - respiratory arrest
  - upper airway obstruction
  - emphysema/asthma
  - toxic inhalation
  - near drowning
  - hyperventilation
  - pulmonary embolus
  - fractured ribs/flail chest
  - pneumothorax
  - traumatic asphyxia

Documentation of assessment and therapy on patient record in appropriate terminology is required for completion.

5. Given real or simulated situations and necessary equipment, the student will recognize indications for and demonstrate appropriate use (based on procedure manual) for: nasal cannula, oxygen mask, venturi mask, partial/non-rebreathing mask, head tilt, jaw thrust, chin lift, triple airway maneuver, oropharyngeal and nasopharyngeal airways, pocket mask, bag-valve-mask, demand valve, suctioning, esophageal obturator airway, esophageal gastric tube airway, endotracheal tube, nasogastric tube. Tidal volume minimum is 800cc where applicable; appropriate oxygen percentage based on accepted standard must be used where applicable; assessment of ventilation and appropriate action where applicable; appropriate head position where applicable; documentation of therapy on patient record in appropriate terminology required for completion.
6. Given a real or simulated patient and the appropriate equipment, the student will demonstrate with 95% accuracy the correct procedure for assessing a chest using inspection, palpation, percussion, and auscultation. Documentation of findings on patient record required for completion.



7. Given a real or simulated patient situation and necessary equipment, the student will recognize the indications for and demonstrate with 95% accuracy the aseptic techniques for chest decompression and cricothyrotomy. Procedure manual will be standard.

PAR 0203

1. Given a real or simulated patient and necessary equipment, the student will demonstrate with 95% accuracy the appropriate (based on procedure manual) assessment techniques for patients with the following illnesses/injuries: cardiac, CNS, soft tissue, musculoskeletal. Documentation of findings on patient record in appropriate terminology is required for completion.
2. Given real or simulated patients and necessary equipment the student will recognize (based on accepted signs/symptoms) and provide appropriate therapy based on accepted standard of care for the following: angina, myocardial infarction, congestive heart failure, cardiac tamponade, cardiogenic shock, syncope, hypertensive crises, myocardial trauma, head trauma, spinal injury, soft tissue injury, seizures/status epilepticus, coma, stroke, burns, facial/neck trauma, abdominal trauma, fracture/dislocation, sprain/strain. Documentation of findings and therapy provided on patient record required.
3. Presented with a rhythm strip or patient connected to a cardiac monitor, the student will identify the normal or abnormal rhythm with 95% accuracy. Arrhythmias may include pure or combinations of: normal sinus rhythm, bradycardia, sinus/atrial/junctional/ventricular tachycardia, sinus arrhythmia, sinus arrest, premature atrial/junctional/ventricular contractions, atrial/ventricular flutter, atrial/ventricular fibrillation, junctional rhythm, 1, 2, 3, degree heart block, asystole, idioventricular rhythm, pacemaker rhythm. Appropriate drug, manual, or electrical therapy according the ACLS standard and appropriate documentation in medical terminology will be required for completion.

4. Given a simulated emergency situation and any necessary equipment, the student will demonstrate with 100% accuracy the correct procedure for cardiopulmonary resuscitation according to the AHA BCKS standards. Performance must include correct compression position, depth, and ventilatory volume of 800cc. Performance completion will include manual and mechanical CPR.
5. Given a real or simulated situation, the student will recognize indications for and demonstrate, with 95% accuracy according to procedure manual standards, the procedure for use of a portable monitor/defibrillator to include cardiac monitoring, defibrillation, cardioversion, safety precautions, equipment maintenance. Documentation on patient record in medical terminology is required for completion.
6. Given real or simulated situations and necessary equipment, the student will recognize indications for and demonstrate according to procedure manual with 95% accuracy the following: spinal immobilization, dressing/bandaging wounds, hemorrhage control, splinting fractures. Documentation on patient record in medical terminology will be required for completion.

PAR 0204

1. Given a real or simulated situation and necessary equipment, the student will recognize (according to accepted signs/symptoms) and provide appropriate therapy according to accepted standard of care with 95% accuracy for the following: diabetic ketoacidosis/hypoglycemic reaction, anaphylaxis, heat/cold injuries, poisoning/overdose, acute abdomen, genitourinary problems, OB/GYN emergencies, sudden infant death, pediatric seizures, battered child, pediatric respiratory emergencies, emotionally disturbed.
2. Given a real or simulated situation and necessary equipment, the student will recognize need for and provide appropriate management, according to accepted standard of care with 95% accuracy, for: antepartum hemorrhage, normal childbirth, breech birth, prolapsed cord, postpartum hemorrhage.

3. Given a simulated disaster situation involving multiple victims and necessary equipment and "personnel", the student will triage the victims according to accepted categories and coordinate the efforts of additional manpower when they arrive. Patient care will be allowed until arrival of manpower. Coordination of patient disposition to prevent hospital overload, documentation/recording required for completion.
4. Given a hand-carried or vehicle-based transmitter/receiver, the student will demonstrate the use of the equipment by transmitting/receiving given information in a professional manner using appropriate medical terminology.
5. Given a real or simulated situation and the necessary biotelemetry equipment, the student will demonstrate with 95% accuracy the transmission of an EKG signal to a hospital base-station. Trouble-shooting equipment may be required if situation dictates.

TO:           Emergency Medical Services  
              Hospital Emergency Rooms  
              Industrial Rescue Squads

FROM:         Vicki Garlock, RN, BSN, EMT  
              EMT/Paramedic Coordinator  
              Pensacola Junior College

REGARDING:   Paramedic skills analysis

In order that we may be able to provide your service or institution with employable graduate paramedics, and improve our training program, we are asking for your assistance. Please find attached a list of skills or tasks that are generally expected of a paramedic for your evaluation. Some of the skills are understandably mandatory, others are not. Please examine each skill and make the necessary determination. Please feel free to add any skills which you deem necessary.

Your time and effort is greatly appreciated in our quest to improve our program, and we hope that this will be only the beginning of the exchange of needs and ideas.

PARAMEDIC SKILLS

|                                                        | NECESSARY | DESIRABLE | UNNECESSARY |
|--------------------------------------------------------|-----------|-----------|-------------|
| Take patient history                                   |           |           |             |
| Physical examination                                   |           |           |             |
| General appearance, level of consciousness             |           |           |             |
| vital signs                                            |           |           |             |
| head-to-toe survey (inspection/palpation)              |           |           |             |
| auscultation of heart                                  |           |           |             |
| auscultation of lungs                                  |           |           |             |
| auscultation of abdominal sounds                       |           |           |             |
| evaluation of neurological status                      |           |           |             |
| evaluation of neuromuscular functions                  |           |           |             |
| Peripheral venipuncture                                |           |           |             |
| Draw blood sample                                      |           |           |             |
| External jugular venipuncture                          |           |           |             |
| Subclavian venipuncture                                |           |           |             |
| Assemble IV equipment                                  |           |           |             |
| Calculate IV flow rate                                 |           |           |             |
| Establish lifeline with                                |           |           |             |
| over-the-needle catheter                               |           |           |             |
| winged infusion device                                 |           |           |             |
| inside-needle-catheter                                 |           |           |             |
| Use of MAST suit                                       |           |           |             |
| Calculate drug dosage                                  |           |           |             |
| Draw up medication in syringe from ampule/vial         |           |           |             |
| Administer drugs from prepackaged disposable syringe   |           |           |             |
| Give subcutaneous injection                            |           |           |             |
| Give intramuscular injection                           |           |           |             |
| Give intravenous medication thru IV insertion site     |           |           |             |
| Head tilt                                              |           |           |             |
| Triple airway maneuver                                 |           |           |             |
| Crossed-finger technique                               |           |           |             |
| Manual sweep of mouth                                  |           |           |             |
| Back blows                                             |           |           |             |
| Abdominal thrust                                       |           |           |             |
| Mouth-to-mouth ventilation (infants, children, adults) |           |           |             |
| Oxygen masks, nasal cannulas                           |           |           |             |
| Demand Valve                                           |           |           |             |
| Oropharyngeal airways                                  |           |           |             |
| Nasopharyngeal airways                                 |           |           |             |
| Pocket mask                                            |           |           |             |
| Bag-valve-mask and reservoirs (adults, children)       |           |           |             |
| Oro/nasopharyngeal suctioning                          |           |           |             |
| Tracheal suctioning                                    |           |           |             |
| Tracheotomy suctioning                                 |           |           |             |
| Direct laryngoscopy                                    |           |           |             |
| Insertion of endotracheal tube (adults, infants)       |           |           |             |



|                                                                     | NECESSARY | DESIRABLE | UNNECESSARY |
|---------------------------------------------------------------------|-----------|-----------|-------------|
| Management of prolapsed cord                                        |           |           |             |
| Insertion of nasogastric tube                                       |           |           |             |
| Irrigation of nasogastric tube                                      |           |           |             |
| Basic extrication                                                   |           |           |             |
| vehicle stabilization-hazard control                                |           |           |             |
| gaining access to patient                                           |           |           |             |
| disentanglement of patient                                          |           |           |             |
| packaging patient                                                   |           |           |             |
| extrication of patient                                              |           |           |             |
| Specialized rescue techniques                                       |           |           |             |
| use of ropes, knots, hitches, latches                               |           |           |             |
| repelling                                                           |           |           |             |
| Completion of required patient records                              |           |           |             |
| Communication of information to physician<br>(vocal, written)       |           |           |             |
| Operation of 2-way radio                                            |           |           |             |
| Operation of telemetry system                                       |           |           |             |
| Convert one unit of measure to another in metric<br>system          |           |           |             |
| Calculate weight in kilograms when given weight<br>in pounds        |           |           |             |
| Adding medication to IV bag                                         |           |           |             |
| Changing IV bags                                                    |           |           |             |
| Recognize non-functioning IV                                        |           |           |             |
| Proper assembly, cleaning, functioning, testing<br>of all equipment |           |           |             |
| Chest decompression                                                 |           |           |             |
| Intracardiac injection                                              |           |           |             |
| Pericardiocentesis                                                  |           |           |             |
| Application of rotating tourniquets                                 |           |           |             |
| Carotid sinus massage                                               |           |           |             |
| Insertion of foley catheter                                         |           |           |             |
| Interviewing/communication techniques for<br>emotionally disturbed  |           |           |             |
| Violence containment on emotionally-disturbed                       |           |           |             |
| Lifting & moving patients (carries)                                 |           |           |             |
| Fusion beats                                                        |           |           |             |
| Pediatric rhythm                                                    |           |           |             |
| Junctional rhythm                                                   |           |           |             |
| Sick sinus syndrome                                                 |           |           |             |
| Brady/Tachy syndrome                                                |           |           |             |
| PAT                                                                 |           |           |             |
| Escape beats                                                        |           |           |             |



|                                                                      | NECESSARY | DESIRABLE | UNNECESSARY |
|----------------------------------------------------------------------|-----------|-----------|-------------|
| Insertion of esophageal obturator airway                             |           |           |             |
| Cricothyrotomy                                                       |           |           |             |
| Application of monitoring electrodes (lead II, MCL <sub>1</sub> )    |           |           |             |
| Use of portable monitor/defibrillator                                |           |           |             |
| Identify cardiac arrhythmias                                         |           |           |             |
| NSR                                                                  |           |           |             |
| sinus arrhythmia                                                     |           |           |             |
| sinus arrest                                                         |           |           |             |
| sinus bradycardia                                                    |           |           |             |
| sinus tachycardia                                                    |           |           |             |
| premature beats (atrial, junctional, ventricular)                    |           |           |             |
| supraventricular tachycardia                                         |           |           |             |
| atrial fibrillation                                                  |           |           |             |
| atrial flutter                                                       |           |           |             |
| heart block (1, 2, 3 degree)                                         |           |           |             |
| ventricular tachycardia                                              |           |           |             |
| ventricular fibrillation                                             |           |           |             |
| asystole                                                             |           |           |             |
| idioventricular rhythm                                               |           |           |             |
| pacemaker rhythm                                                     |           |           |             |
| bundle branch block                                                  |           |           |             |
| aberration                                                           |           |           |             |
| Recognition of respiratory or cardiac arrest                         |           |           |             |
| Manual external cardiac compression (infant, child, adult)           |           |           |             |
| Use of mechanical CPR device                                         |           |           |             |
| Quick-look paddles                                                   |           |           |             |
| Defibrillation                                                       |           |           |             |
| Cardioversion                                                        |           |           |             |
| Cervical collar                                                      |           |           |             |
| Short spine board                                                    |           |           |             |
| Long spine board                                                     |           |           |             |
| Orthopedic stretcher                                                 |           |           |             |
| Hemorrhage control                                                   |           |           |             |
| Application of dressings and bandages                                |           |           |             |
| Management of avulsions, impaled objects, eviscerations, amputations |           |           |             |
| Treatment of burns                                                   |           |           |             |
| Traction splints                                                     |           |           |             |
| Air splints                                                          |           |           |             |
| Rigid (board) splints                                                |           |           |             |
| Improvised splints                                                   |           |           |             |
| Preparation of mother and delivery of infant in cephalic birth       |           |           |             |
| Management of breech birth                                           |           |           |             |

REFERENCES OBTAINED THROUGH  
THE FLORIDA RESOURCE EDUCATION EXCHANGE

EJ190852      IR505679  
Prehospital Burn Care for Emergency Medical Technicians.  
(Lindstrom, Robert A.)

ED163200      CE018490  
National Apprenticeship and Training Standards for  
Emergency Medical Technicians. (Employment and  
Training Administration (DOL)

ED158073      C0017529  
National Training Course. Emergency Medical Technician.  
Paramedic. Instructor's Lesson Plans. Communications.  
(National Highway Traffic Safety Administration (DOT)).  
"15 individual modules with this title, each has sep-  
arate ED number".

ED150326      CE014502  
Basic Training Course/Emergency Medical Technician  
(Second Edition). Course Guide. (National Highway  
Traffic Safety Administration (DOT)).

ED150325      CE014501  
Basic Training Course/Emergency Medical Technician.  
(1977 Edition). Student Study Guide. (National  
Highway Traffic Safety Administration (DOT))

PROGRAM: RESPIRATORY THERAPY TECHNICIAN

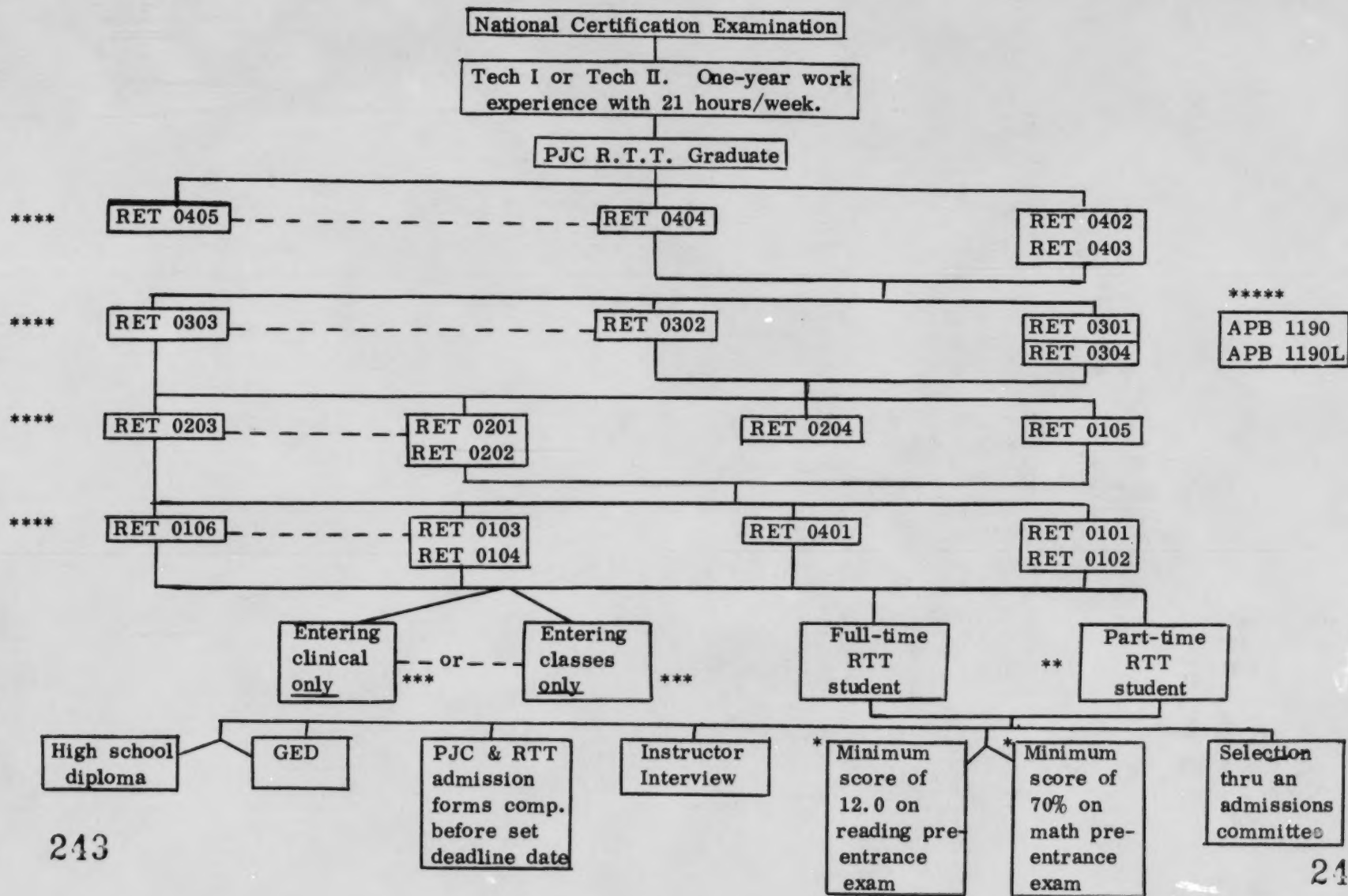
PROGRAM MANAGER: MARCIA WILLIAMS, C.R.T.T.  
DEPARTMENT OF ALLIED HEALTH  
PENSACOLA JUNIOR COLLEGE

Respiratory Therapy Technician is a one year certificate program. The graduate receives a certificate of occupational competency and may move immediately into employment. Employment is maintained by successfully passing the national certification exam taken after one year of working at least 21 hrs/ week.

The program graduate is trained to perform safely and effectively the following patient related services, under medical supervision.

- Medical Gas therapy
- Aerosol/Humidity therapy
- Intermittent Positive Pressure therapy
- Pulmonary Drainage
- Cardiorespiratory Drug Administration
- Infection Control
- Assist with Continuous Ventilation
- Cardiopulmonary Resuscitation
- Airway Maintenance
- Pulmonary Function Testing
- Arterial Blood Gases
- Cardiorespiratory Rehabilitation
- Ethical and Medical Law practices
- Clerical Duties

The graduate may begin employment at the Tech I or Tech II level depending on the job description of the clinical facility.



- \* Dates for reading exams are set by the Registrar's Office at Pensacola Campus.

Dates for math exams are set by Allied Health Department office. Any student scoring below 70 per cent may be accepted, providing the student enrolls in the math lab.

- \*\* Part-time students are not required to have instructor interviews or approval of admissions committee. Part-time may not register for clinical courses.

- \*\*\* Full-time students wishing to take exemption exams for clinicals must have one year of documented Respiratory Therapy experience. Exemption exams are given orally and must be scheduled by the Director of Respiratory Therapy. Students must register in the course prior to taking exam.

Full-time students who have successfully completed all didactic R.T.T. courses as a part-time student may enter the clinical phase at the appropriately scheduled time.

- \*\*\*\* All full-time students must register for clinical at the appropriately scheduled time.

- \*\*\*\*\* APB 1190 and 1190L Academic Anatomy and Physiology may be taken any time. The student must complete and pass the course in order to graduate.



RESPIRATORY THERAPY TECHNICIAN  
Pensacola Junior College

PROGRAM GOALS

1. The student is prepared for employment in any Respiratory Therapy department as a Tech I or Tech II, depending on the criteria set by the institution. The National Board for Respiratory Therapy requires graduates to work at least 21 hours per week for one year before the certification examination is attempted.
2. The student is prepared for taking his/her place as a member of the health care team demonstrating proper professional conduct, attitude, and ethical moral standards.
3. The student is prepared to take the national certification examination, which is required by the Joint Commission on Accreditation of Hospitals, to maintain employment.
4. The student is a certified Respiratory Therapy Technician with a certificate of completion and is prepared to successfully pursue an A.S. Degree.



## LEARNING OUTCOMES AT EXIT LEVEL

### Respiratory Therapy Technician Program

1. Given an actual clinical situation, the student will be able to disassemble, clean, sterilize, reassemble, test and troubleshoot respiratory therapy equipment to patient units, periodically re-checks equipment and performs necessary service to keep it functioning safely and effectively. The student will use isolation and aseptic techniques when necessary to prevent the spread of infection, with 95% accuracy.
2. Given an actual clinical situation, the student will be able to safely and effectively administer IPPB and humidity/aerosol treatment. He must be able to recognize the indications, contraindications, hazards, adverse patient response and take corrective action with 100% accuracy.  
  
RET 0201 R.T. Equipment  
RET 0202 R.T. Equipment Lab  
RET 0401 Math and Science  
RET 0101 Anatomy and Physiology  
RET 0102 Anatomy and Physiology Lab  
RET 0203 Clinical Pract. II
3. Given an actual clinical situation, the student will safely administer medical gas therapy. The student will be able to recognize the indications, contraindications, hazards of medical gas administration and adverse patient response. He will choose the equipment used to administer and monitor medical gases such as cannulae, masks, hoods, tents, humidifiers, and nebulizers. He will assemble and pre test medical gas administering equipment. He will be able to chart all necessary information. 100% accuracy is required.  
  
RET 0103 R.T. Equipment  
RET 0104 R.T. Equipment Lab  
RET 0106 Clinical I
4. Given an actual clinical situation, the student will be able to administer pulmonary drainage procedures effectively using vibrators, percussors, suction machines and oxygen therapy devices. He must be able to identify indications, contraindications, and

hazards involved with pulmonary drainage procedures. He must be able to instruct the patient and family in pulmonary drainage procedures, cough instruction, airway maintenance, and care of respiratory therapy equipment used in the home. 95% accuracy is required.

RET 0404 Pulmonary Rehabilitation  
RET 0402 Clinical Med.  
RET 0403 Clinical Med. Lab  
RET 0405 Clinical IV

5. Given an actual clinical situation, the student will be able to recognize cardiorespiratory failure and arrest, techniques of airway clearance and maintenance. He must perform manual cardiopulmonary resuscitation and evaluation of resuscitative efforts. He will be able to effectively and safely ventilate patients with adjunct resuscitative equipment. 100% accuracy is required.

RET 0204 Cardiopulmonary Resuscitation  
and Airway Management  
RET 0203 Clinical Practice II

6. Given a physicians order, the student will be able to read, interpret and implement the order. Implementation of the order will include operation of all types of nebulizers, accurately compute, draw and administer aerosolized drugs, observing and recording patient response during and after treatment. 100% accuracy is required.

RET 0105 Pharmacology  
RET 0303 Clinical Practice III

7. Given an order for Pulmonary function testing, the student will be able to assist in the measurement of lung volumes and the use of measuring devices with 75% accuracy.

RET 0405 Clinical IV

8. Given a physicians order for arterial blood gases, the student will be able to draw, run and report arterial blood gases with direct supervision with 100% accuracy.
9. Given an actual clinical situation, the student will be able to assist in the application of ventilators to patients, monitor the patient's ventilatory status through use of spirometers, pressure gauges

and chest auscultation. He must recognize indications, contraindications, and possible hazards involved with continuous ventilation. He will be able to modify therapy techniques to deal with adverse patient response. 100% accuracy is required.

RET 0301 Advanced R.T. Equipment  
RET 0304 Advanced R.T. Equipment Lab  
RET 0303 Clinical III

10. Given an actual clinical situation, the student will be able to use proper communication skills, to establish rapport with the patient and members of the health care team. He will demonstrate proper professional conduct, attitude and ethical standards.

RET 0106 Clinical I  
RET 0203 Clinical II  
RET 0303 Clinical III  
RET 0405 Clinical IV

## LEARNING OUTCOMES: COURSES

### RET 0101 Respiratory Anatomy and Physiology - 2 Credits

1. Given a patient in the clinical setting, the student will be able to apply respiratory anatomy and physiology to the practice of Respiratory Therapy. Application should include: lung volumes, mechanisms of respiration and homeostasis, respiratory interactions with other body systems. 75% accuracy is required.
2. Given a patient in the clinical setting, the student will be able to communicate effectively with members of the health care team the application of anatomy and physiology in the practice of Respiratory Therapy.

### RET 0102 Respiratory Anatomy and Physiology Lab - 1 Credit

1. Given models, the student will locate, identify and explain the function of the constituents of the Respiratory and Circulatory systems with 75% accuracy.
2. Given a list of choices the student will write and present orally, an essay on the importance of the Respiratory and Circulatory systems to Respiratory Therapy.

### RET 0103 Introduction to Basic Respiratory Therapy Equipment - 2 Credits

1. The R.T. student will be able to discuss and/or choose from a list of correct answers indications, contraindications, hazards, trouble shooting techniques and safety precautions for administering medical gases, humidity producing equipment, oxygen administering equipment and oxygen analyzing equipment. The discussion must be sufficient to distinguish each piece of equipment from the other. The student must be able to conduct the discussion in an impromptu manner. A minimum of 75% accuracy is required.
2. The student will be able to calculate mathematical problems related to medical gases, humidity producing devices and oxygen administering devices.

RET 0104 Introduction to Basic Respiratory Therapy  
Equipment Lab - 1 Credit

1. Given the necessary equipment, the R.T. student will perform selection, assembly, trouble shooting and safety precautions when administering medical gases, humidity producing equipment, oxygen administering equipment and oxygen analyzers. The student must be able to recognize and correct any problems that may occur with the equipment within two minutes with a minimum of 75% accuracy.
2. Given a practical clinical simulation, the R.T. student will calculate mathematical problems that relate to medical gases, humidity producing equipment and oxygen administering equipment. Calculators may be used but knowledge of formulas must be demonstrated. A minimum of 75% accuracy within two minutes is expected.

RET 0106 Clinical I - 9 Credits

1. Given a physician's order to administer medical gas therapy in the clinical setting, the R.T. student will select, assemble, set-up, trouble shoot and chart the complete procedure. This procedure would include oxygen transports, and all modes of basic medical gas administration. This procedure must include following and enforcing all safety rules.
2. Given a physician's order to discontinue administration of medical gas therapy in the clinical setting, the R.T. student will discontinue therapy, disassemble, clean and sterilize equipment, and chart. This procedure includes all modes of basic medical gas administration. This procedure must include following and enforcing all safety rules.
3. Given a list of patients using medical gas therapy, the R.T. student will perform equipment rounds on all patients using basic modes of medical gas therapy. This procedure will include charting, changing out necessary equipment, trouble shooting equipment for accuracy and safety. This procedure must include following and enforcing all safety rules.
4. Given a clinical setting the R.T. student will establish rapport with other members of the health



care team, assist them as requested and perform routine departmental procedures. This will include receive and record telephone requests for service, process orders, complete clerical work and orally communicate about patient therapy according to hospital and code of ethics policies.

5. Given a clinical setting, the student will be able to discuss hospital organization and structure and how Respiratory Therapy relates to other services as part of the health care team.

RET 0201 R.T. Equipment - 1 Credit

1. The student must successfully perform all outcomes for basic R.T. equipment.
2. The student will be able to describe the indications, contraindications, and hazards involved with administering IPPB. He must be able to describe adverse patient response and take corrective actions with a minimum of 75% accuracy.
3. The student will be able to describe a complete procedure for administering IPPB to all patients. The description should be sufficient to differentiate one patient from another, and one machine used from another.

RET 0202 R.T. Equipment Lab - 1 Credit

1. The student must be able to successfully perform all outcomes of basic R.T. Equipment Lab.
2. Given the necessary equipment, the student will identify, explain the function of and set up each machines for Mechanical Ventilation Administration. The student will be able to explain the functional modalities of each device. 75% accuracy is required.
3. Given an Mechanical Ventilator, the student will be able to correct within two minutes any problems that may be simulated during profieciency examinations.

RET 0105 Pharmocology - 1 Credit

1. The student must have successfully performed all outcomes for basic R.T. Equipment, Math & Science, and Applied A&P.



2. The student will be able to describe the general principles of drug actions, methods of administration, and adverse patient responses to drugs with 75% accuracy.
3. The student will be able to make drug cards for each drug stating their generic name, common name, chemical name, indications, contraindications and dosages according to the PDR with 100% accuracy.

RET 0204 Cardiopulmonary Resuscitation and Airway Management - 3 Credits

1. The student must successfully perform all outcomes for Applied A&P.
2. Given the necessary equipment, the student will become certified in basic life support according to the standards set by the American Heart Association.
3. The student will describe methods of airway maintenance. Descriptions will include oropharyngeal and nasopharyngeal artificial airways, intubation and tracheostomy care. 75% accuracy is required.
4. The student will be able to describe all methods of suctioning including cough responses, sterile techniques and equipment necessary. 75% accuracy is required.

RET 0203 Clinical II - 9 Credits

1. The student must successfully perform all outcomes for clinical practice I.
2. Given a physician's order, the student will be able to read, interpret and implement the order. Implementation will include accurately calculating, drawing, administering, and observing the effects of drugs.
3. Given a physician's order to administer IPPB, the student will administer therapy, recognize and chart adverse patient response and take corrective action. He will assemble and pretest equipment necessary to carry out the order with 100% accuracy.
4. Given a clinical situation, the student will be able to recognize and deal with respiratory failure through the application of CPR, adjunct resuscitative equipment, and airway maintenance with 100% accuracy.

RET 0302 Microbiology - 2 Credits

1. The student will be able to successfully perform all outcomes of Term II and IIIA.
2. The student will identify and describe micro organisms most frequently causing respiratory disorders. The description will include equipment related, disease related and hospital related infections. The description will include protective mechanisms of the body against infection. 80% accuracy is required.
3. The student will describe the complete procedure for Isolation techniques employed in the hospitals to prevent spread of infections with 95% accuracy.
4. The student will describe the procedures for cleaning and sterilization. The description should include proper techniques for obtaining cultures of equipment, clinical problems related to respiratory care and suggest corrective actions to prevent infections with 100% accuracy.

RET 0301 Advanced R.T. Equipment - 1 Credit

1. The student will be able to perform all outcomes of Term II and IIIA successfully.
2. The student will be able to describe the indications, contraindications, and hazards of continuous mechanical ventilation. He will be able to describe methods of monitoring patient's ventilatory status through the use of spirometers, pressure gauges and auscultation. The description should also include methods of modifying equipment to deal with adverse patient response.
3. The student will be able to explain the use of arterial blood gases in the maintenance of ventilator patients. The explanation should include weaning procedures and use of CPAP and PEEP.
4. The student will be able to describe parameters used to make ventilator settings and changes with 75% accuracy.

RET 0304 Advanced R.T. Equipment Lab - 1 Credit

1. Give a ventilator and the necessary information, the student will be able to set the ventilator for continuous ventilation. The student will be able to identify, and explain the function of each setting on the machine with 100% accuracy.
2. Given the necessary equipment, the student will implement IMB, CPAP, and PEEP according to the descriptions from all clinical facilities.
3. The student will be able to assemble equipment and carry out the procedure for obtaining blood through an arterial stick in a simulated patient. 100% accuracy is required.

RET 0303 Clinical III - 3 Credits

1. The student will be able to successfully perform all outcomes of Terms II and IIIA.
2. Given a physician's order and under direct supervision, the student will initiate, and maintain a patient during continuous mechanical ventilation, according to hospital procedure manual.
3. Given a physician's orders draw, run and report arterial blood gases. The student will follow the procedure in the departmental manual.
4. Given a physician's orders the student will set up IMB, CPAP, and PEEP according to hospital policy.

RET 0401 Math and Science - 3 Credits

1. Given a calculator and patient information, the student will be able to calculate:  $V_E$ , predicted  $V_T$ , corrected  $V_T$ , estimated  $V_C$ , Dec, Sec, temperature conversions, metric conversions, duration of flow, air:  $O_2$  ratios, drug dilutions, predicted  $PAO_2$ , predicted  $FiO_2$ , gas laws and gas densities, relative and body humidities, and basic chemistry and physics that applies to Resp. Therapy. All work will be shown with each calculated answer.
2. Given a clinical simulation situation, the student will be able to apply each of the conversions in Outcome #1 to determine the correct answer. 75% accuracy is required.

RET 0402 Clinical Medicine - 3 Credits

1. The student will be able to successfully perform all outcomes of Terms II, and IIIA and B.
2. Given necessary information, the student will explain the basic pathological processes of all respiratory diseases. The explanation should include etiology, symptoms, diagnosis, therapy and prognosis of each disease. Explanation must be sufficient to distinguish one disease from another.
3. The student will be able to describe the application of all modes of respiratory therapy to the respiratory diseases. The description must be in accordance with hospital policy procedures.

RET 0403 Clinical Med. Lab - 1 Credit

1. Given a patient's chart, the student will be able to identify the patient's disease state according to the physicians description of each disease, and information obtained from the chart.
2. Given the necessary information, the student will be able to identify specific diseases from a list of criteria for each disease. 75% accuracy is required.

RET 0404 Pulmonary Rehabilitation - 2 Credits

1. The student will be able to successfully perform all outcomes from Terms II and IIIA and B.
2. Given a physician's order, the student will describe methods for instructing patients and patient's families in the use of equipment and techniques involved in self care. The description will be accurate according to the physician's orders.
3. Given a physician's orders for pulmonary drainage, the student will explain procedures including patient positioning, adjunct equipment, indications, contraindications and hazards. The explanation must be in accordance with hospital procedure policy.

RET 0405 Clinical IV - 10 Credits

1. All procedures performed in clinicals I, II, and III will be performed with 75% accuracy.
2. Given a physician's orders, the student will be able to perform pulmonary drainage on all patients. He will be able to instruct patients in home care techniques. He will be able to use adjunct equipment for pulmonary drainage, according to hospital policy.
3. Given a patient's chart, the student will write a case study on a patient disorder of his choice. The case study must be relevant to respiratory therapy. The case study will be presented orally and must include all pertinent information related to the patient.
4. Given a patient's chart, the student will be able to effectively communicate patient information to other members of the health care team. It must be accurate enough for others involved to understand the information communicated.

## EMPLOYERS INFORMATION

The following job descriptions contain the competencies of an Respiratory Therapy Technician graduate. The job descriptions are approved by the Joint Commission of Accreditation of Hospitals. Job descriptions are routinely reviewed and updated by hospital administration.

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JOB DESCRIPTION

RESPIRATORY CARE

JOB TITLE: Staff Therapist I

I. Responsibilities and Authorities:

A. Responsible for routine of respiratory care under direction of shift supervisor and conformance with established hospital policies. Responsible for planning and carrying out respiratory care functions for the entire area of assignment. Responsible for job knowledge and personal growth through continuing education.

B. Unique Activities:

1. Installs and uses all common oxygen administering equipment.
2. Performs aerosol, IPPB, chest physiotherapy including administration of medication.
3. Responds to call Code "3" and performs CPR.
4. Performs oral-pharyngeal and endotracheal aspiration.
5. Assists in routine maintenance repair and cleaning equipment.
6. Assists in instructing patients and their families.
7. Transports and monitors patient with oxygen throughout the hospital.
8. Charts and maintains records for patients and department files.

II. Special Qualifications and Job Knowledge:

- A. Ability to inter-relate with co-workers, physicians, visitors and departmental personnel.
- B. Ability to perform under stress conditions as brought about by heavy work load.
- C. Depth of knowledge in cardio-pulmonary anatomy and physiology.

JOB TITLE: Staff Therapist I - Respiratory Care (continued)

III. Physical Demands and Working Conditions:

Considerable walking and standing involved in patient care; bending, stooping, leaning, kneeling in operating equipment and performing therapy in close quarters around patient bedside. Frequently necessary to push heavy and bulky wheeled equipment through hallways and in and out of elevators. Exposed to isolated patients and infectious material such as blood, sputum and vomitus frequently. Exposed to noise of high pressure air and equipment alarms daily.

## JOB DESCRIPTION

JOB TITLE: Staff Therapist

### I. Job Summary

Under direction, performs the following tasks or duties as requested by the physician, or according to departmental policies: IPPB therapy with monitoring techniques, aerosol therapy, including ultrasonic nebulization therapy. Performs all forms of oxygen and special gas therapy, all types of breathing exercises, chest physiotherapy procedures, CPR procedures, set up and maintain patients on continuous ventilation, including monitoring techniques, blood gas sampling, blood gas analysis. Carry out all procedures completely and accurately, including all paper work. Perform other duties as may be assigned by the supervisor.

### II. Personal Qualifications:

Good grooming, good character, above average mental ability and flexibility. Must be energetic and resourceful. Must have good patient rapport. Must be able to communicate effectively with physicians, nursing personnel and co-workers.

### III. Performance Requirements:

#### A. Functions: Major TASKS

1. Correctly and safely administer all procedures associated with IPPB therapy, oxygen and special gas mixtures, breathing exercises, chest physiotherapy procedures, aerosol therapy and ultrasonic therapy.
2. Set-up, service and monitor ventilator therapy associated with continuous ventilator therapy, including IMV, PEEP and CPAP (CPPB).
3. Perform blood gas collection and analysis.
4. Perform CPR
5. Assist in teaching new employees and students (Tech II).
6. Perform all record keeping procedures accurately
7. Perform other duties as may be assigned.
8. Perform skin testing, sputum collections, incentive spirometer.

B. Physical Demands

Long hours on feet. Considerable amount of walking involved. Job demands a high degree of mental and manual dexterity.

C. Special Demands

Must be able to function effectively under pressure. Must be able to deal with physicians, nursing staff and co-workers effectively.

## UTILIZATION OF PRODUCT

The curriculum is based upon the philosophy that the student shall "win". In this context, we consider winning as a synonym for success. The student shall succeed. To assure this, the learning outcomes are identified and are made known to the student from the beginning. The utilization methodologies emphasize this approach.

The development of a program map unifies Respiratory Therapy Technician instructors on what is to be taught to the students. It has enabled the faculty to identify more clearly the strengths and weakness of the curriculum and to correct them in a way that meets the learning needs of the student.

The Job-Entry-Competencies acquired from employers enable us to design realistic curriculum that will enable the student to develop the skills needed for continued employment. It also enables employers the opportunity to recognize the competencies students must obtain before graduation.

The faculty members have expressed their desire to facilitate lateral mobility by developing modules based on competency completions.

Our faculty believes this change will help to create happier students and staff and allow more students to "WIN".

In summary, the utilization of the project has diminsions:

1. Acceptance among the faculty that the student shall succeed.
2. Using the program map as the primary vehicle of communication.
3. Monitoring the competencies expected by employers.
4. Revising the evaluation processes.
5. Revising course outcomes based upon employer surveys and feedback from graduates.

REFERENCES OBTAINED THROUGH  
THE FLORIDA RESOURCE EDUCATION EXCHANGE

- ED169355      CE020540  
Health Occupations - Respiration Therapy Technican.  
(Jackson, Jannette)
- ED148900      TM006885  
A Profile Examination System for Physician Extenders  
and a Method for Curricular Prescription. Final  
Report. (Smull, Ned W.; And Others)
- ED128464      TM005657  
The Internal Validation of Level II and Level III  
Respiratory Therapy Examinations. Final Report.  
(Jouett, Michael L.)
- ED128383      TM005505  
Development of Proficiency Examinations and Procedures  
for Two Levels of Respiratory Therapy Personnel.  
Final Report. (Psychological Corp.)
- ED116039      CE005956  
A Guide for Respiratory Therapy Curriculum Design.  
American Association for Respiratory Therapy, Dallas,  
Texas.
- ED066608      VT016509  
An Analysis of Mathematical Competencies Necessary for  
Certain Health Occupations. (Johnson, Emma C.)
- ED040285      VT011175  
Curriculum Guide for Health Occupations. (Oregon State  
Board of Education)



RELATED EDUCATION:

MATHEMATICS

DEVELOPER:

DR. MICKEY SETTLE  
DEPARTMENT OF MATHEMATICS  
PENSACOLA JUNIOR COLLEGE

## PROBLEM ANALYSIS:

The problem is to implement a competence based program of relevant mathematical topics for students in the vocational/technical programs\* at Pensacola Jr. College

The people, their involvement, and their assumed relationship to the above problem are as follows:

- 1) The leaders of the specific programs- these people feel there is a need for a change in the existing program - most agree with the proposed topics and the proposed method of presentation.
- 2) The mathematics department head - he is aware that a problem exists - he is somewhat aware of the proposed plan; however, I feel he is unaware of the communications problems that will develop between the proposed program and the future instructors of the program.
- 3) The instructors in the mathematics department - these people have a low involvement in the decision. However, they will be the key to the success of the proposed program.

The other factors relevant to implementing a competence based program for these areas are:

- 1) The instructional system for students lacking entry level skills.
- 2) The communication of competence concept to instructors.
- 3) The setting of competences for the specific programs and blending them into one mathematics program.

\* These programs include welding; auto mechanic; electricity; drafting

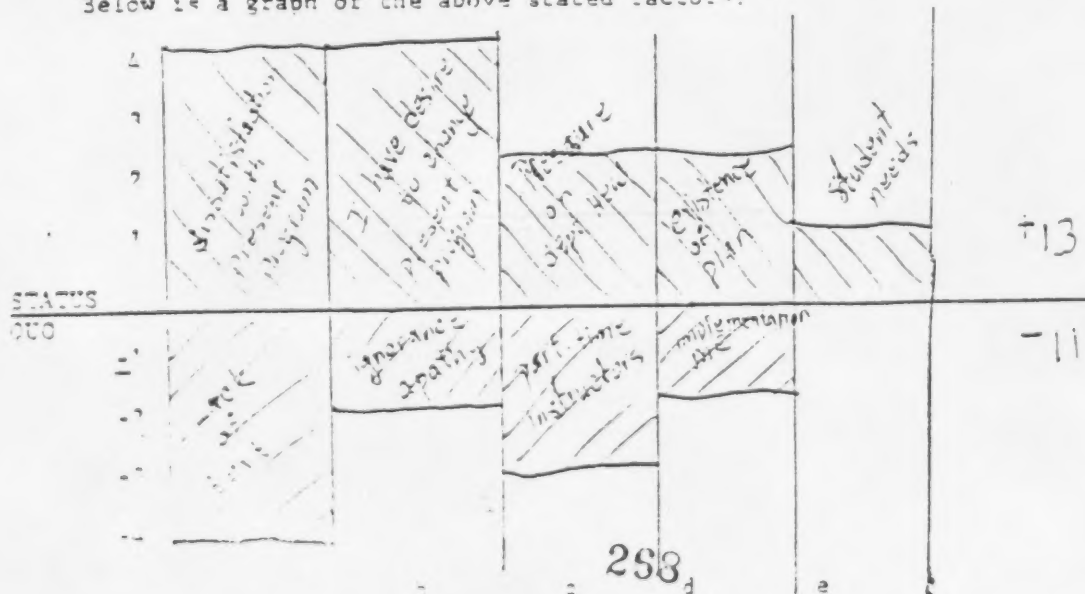
The following factors contribute to implementing the competence based program. The numbers in parentheses indicate the strength of the factor. The scale is from 1- contributes almost nothing to 5- a major factor.

- a) (4) The leaders of the specific programs are dissatisfied with the present program.
- b) (4) I have a desire to change the present program
- c) (2) The math department head dislikes the pressure exerted by the program leaders and the students.
- d) (2) The existence of a proposed program outcomes map.
- e) (1) The student's needs.

The following factors oppose the implementation of the competence based program. Again, the numbers in parentheses indicate strength

- a) (4) Lack of a textbook designed in a competence based approach
- b) (2) Instructor ignorance about and apathy toward such programs
- c) (2) The use of part-time instructors to teach these courses
- d) (2) The implementation coming from me

Below is a graph of the above stated factors:



Restraining force "lack of textbook" could be reduced by selecting the best available on the current market then screening and ordering the text's topics to meet map specifics. Additional materials could be developed to supplement the selected textbook.

Restraining force "use of part-time instructors" can not be reduced. In fact, it will probably increase. However, a short workshop with these people could improve the situation.

Restraining force "instructor ignorance and apathy" could be reduced via the workshop approach

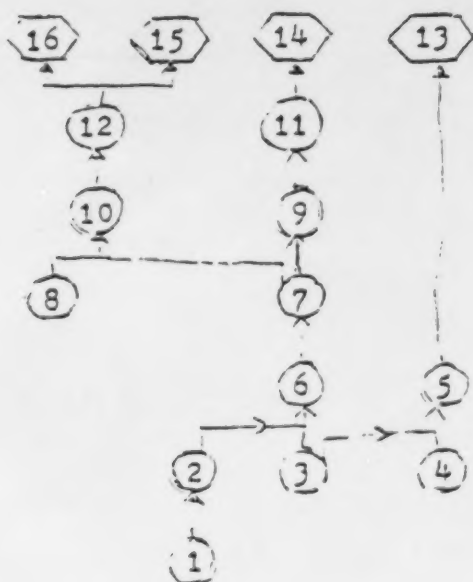
All helping forces could be increased via meetings with the department head and program leaders. These meetings would allow presentation of the proposed program and education of all concerned to the competence based approach

The plan of action to implement the competence based program is as follows:

- 1) Meet with department head and program leaders to present the proposed mathematics program. Explain the content and design of the program. Extract possible changes and locate possible opposition.
- 2) Develop, along with the department head, a plan whereby all instructors in the program will attend a workshop. This workshop will explain the competence based approach and outline both scope and sequence of topics.
- 3) Select an appropriate textbook and develop supplemental materials that will enable the program to function.

*M. B. Little*

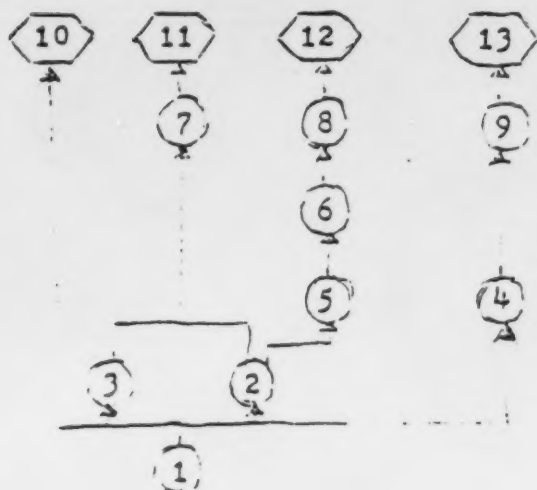
# EXISTING MAP 101 COURSE MAP



1. Compute expressions containing two or more operations and/or parentheses.
2. Compute expressions containing integers.
3. Solve equations of the form  $ax = b$ .
4. Translate correctly between per cent notation and decimal notation systems.
5. Solves basic per cent problems.
6. Solve first degree equations.
7. Solve fractional equations.
8. Reads a sine ratio table.
9. Given a formula and numeral values for all variables except one, solves the formula for the specified variable.
10. Constructs a proportion containing an unknown side of a right triangle.
11. Given a formula containing two variables, constructs a graph illustrating the relationship.
12. Given a right triangle and the measures of 1 side and a second side or angle, solves for the remaining measures.
13. Solves worded problems containing the concepts of discount, profit, commission.
14. Given a graph of a formula containing two variables and the value of 1 variable, solves for value of other variable.
15. Computes area measure.
16. Computes volume measure.

# PROPOSED MAP 101 COURSE MAP

## CODE

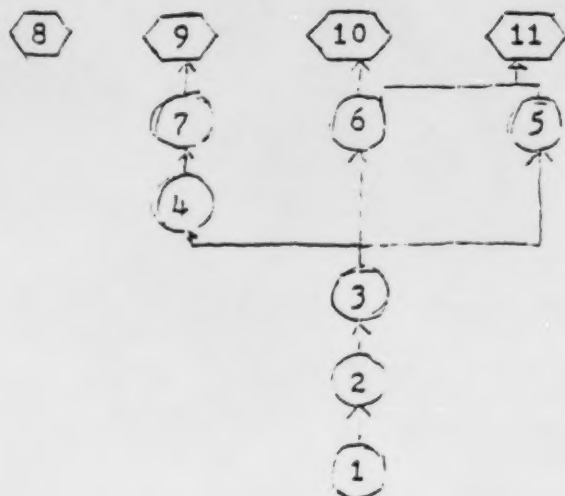


1. Computes basic operations on numbers in fractional and decimal notation systems.
2. Solves equations of form  $ax = b$  and proportions.
3. Translates correctly between per cent and decimal notation systems.
4. Computes expressions containing two or more operations and/or parentheses.
5. Translates measurements.
6. Solves problems containing concepts of linear and angle measurements.
7. Solves basic per cent problems.
8. Computes area measure of selected geometric figures.
9. Given a formula and values for all variables on the right side of the equals sign, computes the value of the remaining variable.
10. Solves worded problems containing the concepts of the four basic operations.
11. Solves worded problems containing the concept of per cent.
12. Computes volume measure of selected geometric solids.
13. Reads with comprehension tables and graphs.

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# PROPOSED MAP 102 COURSE MAP



1. Computes expressions containing two or more operations and/or parentheses.
2. Computes expressions containing integers.
3. Solves first degree equations, second degree equations, and proportions containing one variable.
4. Solves worded problems containing concepts of similar triangles, measurements, and gas laws.
5. Given a formula and a variable, rewrites formula for that variable.
6. Solves first degree equation in two variables.
7. Solves right triangle problems involving sine ratio.
8. Translates between decimal, per cent, and scientific notational systems.
9. Constructs and reads graphs of trig functions.
10. Solves problems based on concept of vectors.
11. Constructs and reads graphs of formulas containing two variables.

LEARNING OUTCOMES  
for  
TECHNICAL MATHEMATICS

1. Given a problem containing addition, subtraction, multiplication, and/or division with whole numbers the technical math student will do the operation(s). To be rated acceptable, the student must be correct in at least 80% of these problems.
2. Given a problem containing addition, subtraction, multiplication, and/or division with numbers in fractional or decimal notation the technical math student will do the operation(s). To be rated acceptable, the student must be correct in at least 80% of these problems.
3. Given a number in scientific notation the technical math student will write the number in decimal notation. To be rated acceptable, the student must be correct in at least 80% of these problems.
4. Given a number in radical notation the technical math student will write the number in decimal notation. To be rated acceptable, the student must be correct in at least 80% of these problems.
5. Given a number involving powers of ten prefixes (such as, mega or nano) either in words or symbols the technical math student will write the number in decimal notation. To be rated acceptable, the student must be correct in at least 80% of these problems.

6. Given a table and/or graph and a value for one variable the technical math student will the value of the other variable. To be rated acceptable, the student must be correct in at least 80% of these problems.
7. Given a geometric figure containing rectangles, triangles, circles, parallel lines, perpendicular lines, and/or intersecting lines the technical mathematics student will find missing measurements in the figure. To be rated acceptable, the student must be correct in at least 80% of these problems.

Assessment of learning outcomes:

All learning outcomes can be assessed via written tests. The tests would consist of several items designed for each outcome. The learner would be required to be successful in say 4 out of 5 of the items to be judged competent for that outcome. In a course setting, the grading system would be designed as follows:

W or F -- failure to complete list of competences

D ----- completion of all the competences at the minimal level

C ----- completion of the competences plus one other outcome.

B ----- completion of the competences plus two other outcomes.

A ----- completion of the competences plus three other outcomes

The following is a list of sample items keyed to each learning outcome:

1. Compute:  $72 \div 9 + 7(5 - 2 \times 2)$  The number is \_\_\_\_\_

2. Compute:  $2/3 + 1/5 \div 1/4 - 5 \times 2/3$  The number is \_\_\_\_\_

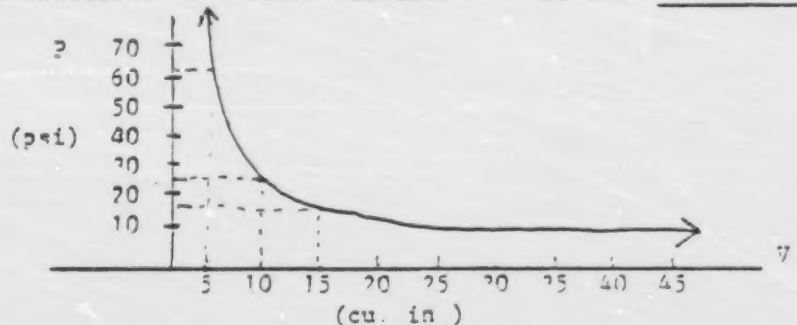
3. Rewrite in decimal notation:  $5.23 \times 10^{-5}$  Results \_\_\_\_\_

4. Rewrite in decimal notation:  $\sqrt{523}$  Results \_\_\_\_\_

(NOTE: Use of calculator permitted, report results to hundredths)

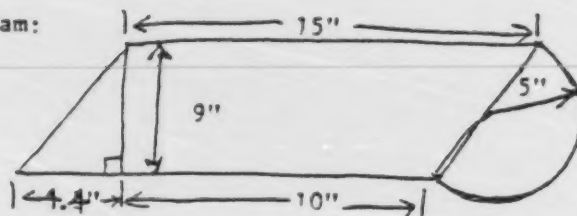
5. Rewrite in decimal notation: 5.2 micro-milliamps Results \_\_\_\_\_

6. Read the graph:



If V has a value of 10 cu. in. then P has a value of \_\_\_\_\_ psi

7. Read the diagram:



The area measure of the figure in square inches is \_\_\_\_\_

RELATED EDUCATION:

COMMUNICATION SKILLS

DEVELOPER:

DR. MARGARET HEATH  
DEPARTMENT OF HUMANITIES  
PENSACOLA JUNIOR COLLEGE



Major Learning Outcome (Employer Expectations)  
Communication Skills

Employers could expect the following major competencies from students after completing the course in Communication Skills.

Obtaining Employment

When applying for employment, the student will demonstrate appropriate speaking, listening, writing, and reading skills:

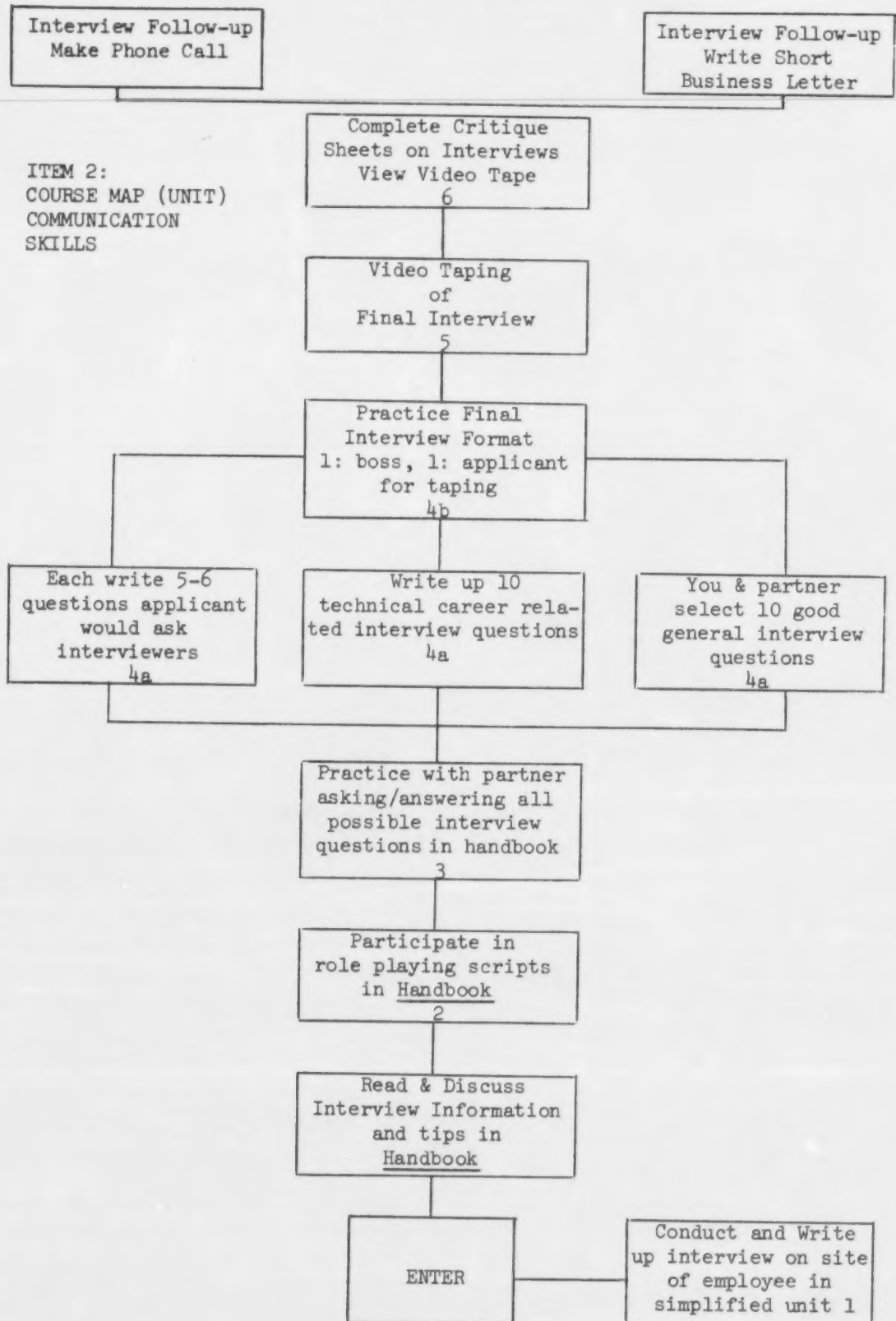
1. He will be able to read with comprehension any written material involved in the job inquiry-application process.
2. He will be able to complete all required application forms, write any necessary inquiry or application letters, and prepare a resume.
3. He will be able to take part in a successful verbal job interview involving both general and technical questions.

Maintaining Employment

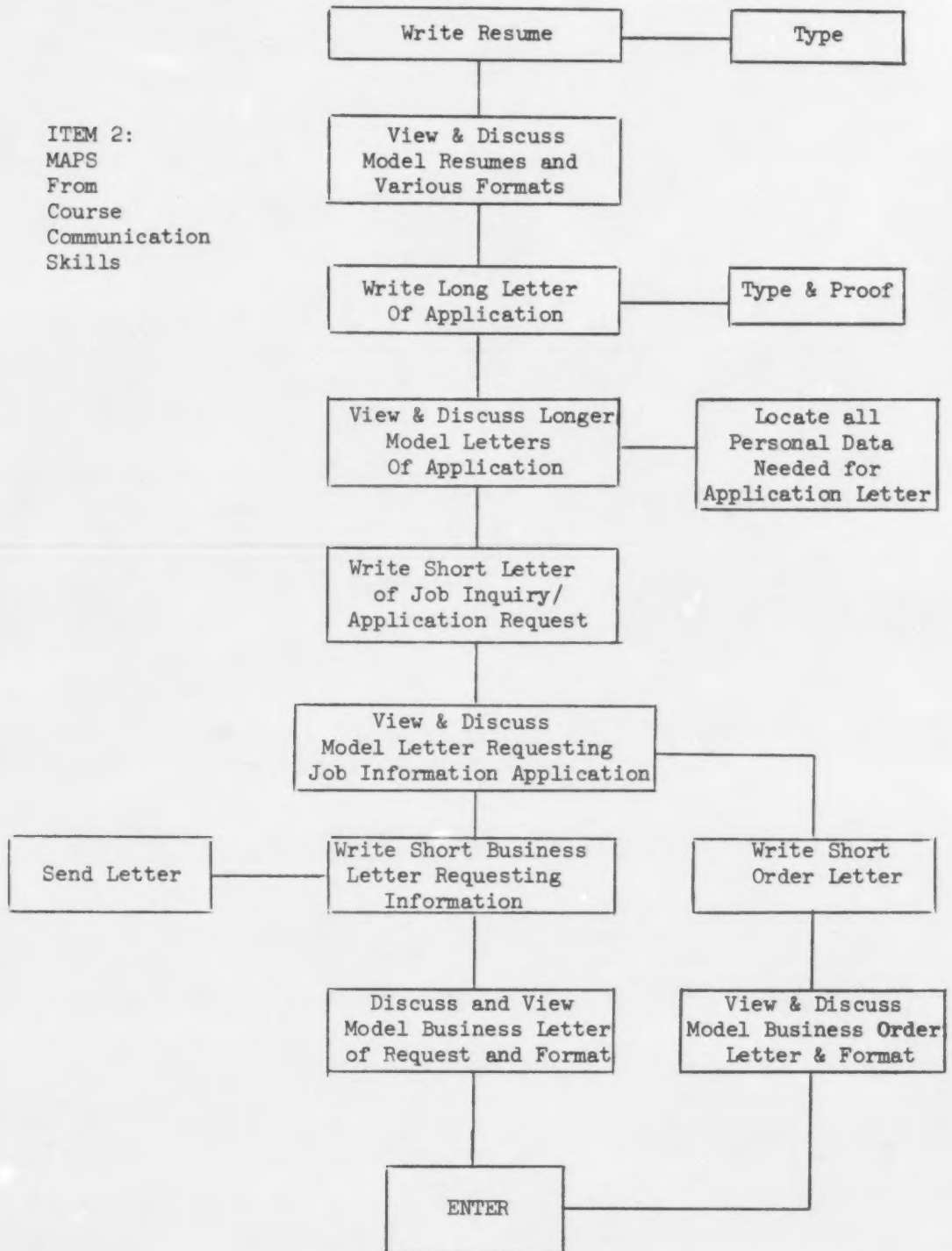
Once employed, the student (should) will demonstrate appropriate communication skills necessary for maintaining employment:

1. Placed in an employment situation, the student will be able to orally communicate effectively with employers or supervisors regarding job responsibilities and/or job assignments.
2. On the job, the student will demonstrate the ability to orally communicate information to a customer (client) and other employees in a coherent, logical, and suitable manner.
3. Placed in an employment situation, the student should be able to listen to and correctly follow oral instructions. In this process he should also be able to ask appropriate questions to accomplish his assigned tasks. (Or the student should demonstrate the ability to comprehend and interpret instructions after listening and subsequently translate into appropriate action.)
4. On the job, the student should demonstrate the ability to write in a logical, correct, and easily understood style any necessary work or supply orders; job related reports, or job related memos or letters.
5. Once employed, the student should be able to read any job related materials such as technical manuals, shop procedures, and business correspondence and memos with comprehension. He should then accurately be able to interpret the material orally or in writing or in action as the task requires.

OVERVIEW OF SEQUENCE OF ACTIVITIES  
FOR UNIT 4  
THE JOB INTERVIEW



SEQUENCE OF LEARNING OUTCOMES/ACTIVITIES  
for  
Business Writing Related to Obtaining Employment  
Communication Skills



## PERFORMANCE ACTIVITIES

### Entry-Level Performance Requirements for Technical Occupational Entry Positions - (Criteria Ref.)

#### COMMUNICATION SKILLS

##### I. OBTAINING EMPLOYMENT

| Action                      | Focus                                                                                         | Criteria                                                                                                                                   |
|-----------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Read and understand      | any written job advertisement, job description, application directions, and application forms | with at least 80 per cent accuracy or demonstrated by performing successfully the necessary tasks related to the written information.      |
| 2. Complete and write       | all required application forms and an application letter                                      | so that they conform to acceptable business/English standards/models recommended by technical or business English handbooks                |
| 3. Prepare                  | a resume                                                                                      | which conforms to acceptable English and business standards/models recommended in technical/business English handbooks.                    |
| 4. Take part                | in a successful job interview involving both general and technical questions                  | as demonstrated in a simulated interview which conforms to the rules of responses recommended by employers and business English handbooks. |
| 5. Communicate successfully | with supervisors regarding job assignments and job responsibilities                           | demonstrated by successful role playing situations involving employee and supervisor.                                                      |
| 6. Communicate              | information to a customer                                                                     | demonstrated by successful role playing situations involving employee and customer                                                         |

# COMMUNICATION SKILLS (continued)

|     | Action       | Focus                                                      | Criteria                                                                                                                                                                           |
|-----|--------------|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7.  | Able to take | an order or message correctly from a phone conversation    | demonstrated by successful role playing activities requiring 100 per cent accurately recorded order or memo                                                                        |
| 8.  | Write        | any necessary work or supply orders                        | demonstrated by completing order models with 100 per cent accuracy                                                                                                                 |
| 9.  | Write        | job related reports such as accident, safety, and progress | demonstrated by completing model reports with 100 per cent accuracy                                                                                                                |
| 10. | Write        | a business letter                                          | demonstrated by successfully composing and completing at least 3 business letters which conform to acceptable English business format as identified by business/English handbooks. |
| 11. | Read         | technical manuals and job related specs                    | demonstrated by successfully completing simulated or real job tasks based on these manuals or specs in a lab or class situation.                                                   |
| 12. | Able to give | directions to fellow employees or helpers                  | demonstrated by successfully participating in simulated situations.                                                                                                                |

#### ITEM 4 SAMPLE ASSESSMENTS PROCEDURES

Learning Outcome: A student will be able to prepare a resume which  
#1 conforms to the model appearing in Business  
Communications Text.

Assessment #1: Draft a resume. Proof, correct and type resume in  
an appropriate final form using the model provided  
in their text (in one weeks time).

Learning Outcome: A student will prepare for and take part in a suc-  
#2 cessful simulated job interview involving both  
general and technical questions conforming to  
the rules, interview response and suggestions in  
the text Business Communication and the PJC  
Career Lab's booklet Employability Skills.

Assessment #2: With a partner, prepare for, practice and present  
a simulated job interview (with one acting as  
boss and one as employee). The interview should  
include 10 general questions and answers, and 10  
technical career related questions and answers.

Learning Outcome: Student will be able to take an order correctly  
#3 from a phone conversation.

Assessment #3: In a role playing situation with a partner, pre-  
pare a phone order simulation. Be sure and write  
down all necessary information concerning date,  
company name, amount, dates of delivery, your  
name, etc.



ITEM 4: TYPES OF ASSESSMENTS IN WRITING  
DIFFERENT TYPES OF WRITING ACTIVITIES  
AND SKILLS IN COMMUNICATION SKILLS

1. Most writing is integrated with or result of Reading, Speaking, Listening or Viewing.

2. Types

1. Career - Business - for Obtaining Employment Applications; Information - Application Request Letters; Resume.
2. Business Letters - On the Job Request, Order, Complaint, Sales, Advertising, Letter Head and Business card design.
3. Technical Writing  
Summary of Tech. Mag. articles, technical processes, equipment, materials, briefs.
4. Descriptive  
Accurate, precise description of tech. machine, process tools, etc.
5. Analysis  
Analysis of tech. processes, films, novel, speeches TV, etc.
6. Argumentation  
Proposal - sales - advertising.
7. Test Taking - Essay answers
8. Use of Technical Vocabulary
9. Proof Reading Techniques - Articles for Tech. Scan.
10. Technical Research Paper - Sources, bibliography, Lib. use.

Mechanics, Topic sentences, paragraph development, leading to unified essay writing.

## ITEM 5 UTILIZATION OF PRODUCT

### Establishment of Basic Skills Lab/Warrington Campus

#### Rationale:

1. The Vocational Education NEEDS of potential students, approximately 30% of Warrington Campus students have inadequate reading and math skills resulting in poor performance in vocational career area subjects - both in theory and lab courses. As a new campus, definite need to establish remediation in basic computation skills as well as reading/language skills to bring (1) Health Related (2) Automotive (3) CETA students up to an "appropriate" grade level which matches grade level of tech-materials, concepts, etc. used in vocational courses.
2. How, and to what extent, this program will meet these needs, and
  1. An appropriately equipped and staffed lab/center will be able to (1) diagnose specific math/reading weaknesses after initial "gross" diagnosis using CAT Level 5 (2) provide leveled remediation, on-going evaluations and final evaluation when student reaches individualized goals.
  2. Staff will monitor and report attendance, progress, evaluation, to vocational instructors; ex. Nursing and Automotive students will be required to attend til achieving a 10th grade reading/math level since their technical manuals are 10th grade or higher.
  3. All Vocational/Technical students on campus will be tested when entering and counseled concerning level and potential for success. Voc/Tech instructors will send problem students, or students can attend voluntarily - will also be integrated part of Communication Skills curriculum, a 3 hour course required for Auto students and an elective for Practical Nursing & Dental Related.
3. How the findings of any evaluations of previous programs have been used to develop this program.
  1. CAEL Evaluations and Follow-Up Project '78-'79 work definitely indicated student need.
  2. Nursing and Practical Nursing have tested students (Nelson Denny and CAT) and found math/reading deficiencies, correlate with poor performance in technical career courses. '79 - '80 Nursing will recommend 13-grade level reading as part of program.
  3. Auto Mechanics, Auto Body, Auto Paint students have been given Pre/Post Reading Tests (California V) for past four years in Dr. Heath's Communication Skills course. Remediation has been given in her course; great need for equipment/materials to enhance remedial process.
  4. CETA Auto Mechanics/Body/Paint students tested--75% reading/math skills at 6-8 grade level. Great difficulty with technical material. Have been using George Stone's IMTS Center for remediation.
4. Does this program provide training for nontraditional career patterns of males and females? Yes (XXX) No ( )

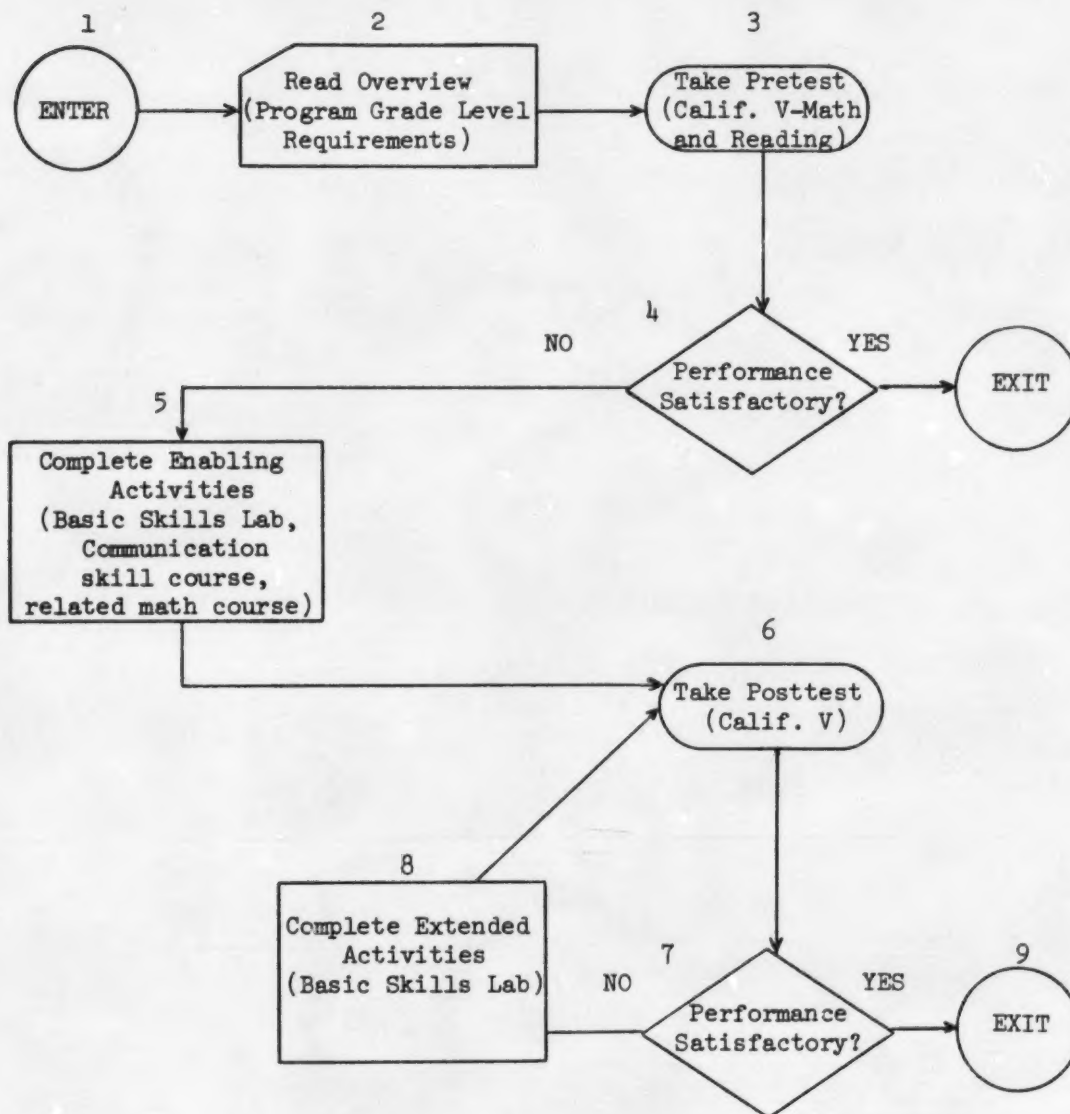
5. If yes, describe the special features.  
1. Remediation and developmental training available to: (a). displaced homemakers, female, single head of household - 80% enrollment of Health Related fields; (b). women in Automotive fields; (c). men in Nursing & Health Related fields.
6. Name and position of person immediately responsible for supervision of program:

Dr. Margaret Heath  
Department Head, Humanities/Liberal Arts & Communications  
Warrington Campus  
Pensacola Junior College

Dr. James Blackwell  
Provost, Warrington Campus  
Department Head, Science  
Pensacola Junior College

ITEM 5: UTILIZATION OF PRODUCT  
PROCEDURES FOR DIAGNOSING/REMEDIATING

VOC/TECH BASIC SKILLS REMEDIATION  
Pensacola Junior College, Warrington



RELATED EDUCATION:

OCCUPATIONAL SAFETY

DEVELOPER:

HOMER GAOUETTE  
DEPARTMENT OF INDUSTRIAL  
TECHNOLOGY  
PENSACOLA JUNIOR COLLEGE

## RELATED EDUCATION

### Occupational Safety Learning Outcome at Completion Level Homer Gaouette

1. The student will demonstrate the ability to recognize a respiratory emergency. Ability will further be demonstrated to react within the 4- to 6-minute envelope from apparent death (clinical death) and actual massive deterioration of brain cells (biological death). Student will demonstrate ability to perform effective BLS (Basic Life Support) and CPR (Cardio-Pulmonary Resuscitation).
2. The student will effectively demonstrate the ability to control severe hemorrhage through understanding of the three main lines of defense. Direct pressure will be initiated first. If further assistance is required, student will apply digital pressure on the supplying artery. Finally, if all else fails, a TQT will be applied.
3. Student will demonstrate ability to react swiftly and accurately when it becomes apparent that a person has been poisoned. Steps will be initiated to dilute the poison as rapidly as possible and then vomiting will be induced except in cases of acids, alkalies and petroleum products.
4. A complete in-depth study of the O.S.H.A., 1971, will create in the student an awareness of:
  - a. the law
  - b. employer responsibilities
  - c. employee rights
  - d. understanding of the overall mission of the O.S.H.A.

### Program Goals

1. Student will be confident and competent to assume a leadership role when confronted with a medical emergency.
2. To create an awareness of the O.S.H.A.



RELATED EDUCATION:

CUSTOMER RELATIONS  
INDUSTRIAL RELATIONS

DEVELOPERS:

DR. VIRGINIA LEES  
DR. MARGARET SIELSKI  
DEPARTMENT OF BEHAVIORAL SCIENCES  
PENSACOLA JUNIOR COLLEGE

Customer Relations  
Industrial Relations

Virginia Lees  
Margaret Sielski

Customer Relations and Industrial Relations are new courses (still in the development stages) offered to vocational and technical students at Pensacola Junior College. Students in Welding; Industrial Technology; Air Conditioning, Heating and Refrigeration; Automotive Mechanics; Major Home Appliance; and Cosmetology, as well as other areas not included in this project, are required to take one of these courses. The content of these courses is very similar. Their different titles reflect the department in which they are offered and the kind of work setting (small shop, complex industry, etc.) that persons with particular vocational skills are likely to enter. The course is being designed as a series of modules. Students in all of the various vocational areas will study the modules concerned with personal adjustment and the development of interpersonal skills. Other modules to be covered will be determined by the particular program the student is in and the skills and information that will be needed in a particular job setting.

The student who completes Industrial Relations or Customer Relations and is ready for employment should be able to:

1. Demonstrate confidence in himself/herself and his/her ability to make a successful adjustment in a work role.
2. Demonstrate assertive interpersonal skills that enable him/her to get along well with co-workers, supervisors, and clients, and that allow him/her to satisfy her/his own needs and wants without violating the rights of others.

3. Identify symptoms of stress caused by rapid social change in America today; recognize signs of stress in his/her own life; and demonstrate skills he/she can use to reduce the physical and emotional effects of stress.
4. Apply basic concepts of role theory to her/his work role and other social roles that make major demands on her/his time and energy.
5. Demonstrate integrity by being in touch with his/her values and making decisions that are compatible with his/her value system.
6. Demonstrate a knowledge of the impact of government policy and programs on industry, services, and the worker.
7. Demonstrate a knowledge of the role of labor unions in American society, and be prepared to make an appropriate choice concerning union membership.
8. Describe the fringe benefits and government programs available to most American workers, including Social Security, health and life insurance, unemployment insurance, retirement programs, pensions, and the like.

NOTE: This was our course description and course objectives as we began the CAEL project. As a result of our participation in the project, we have designed course objectives which are more specific and more measurable. Also, we have decided the courses really should be one course called Customer-Industrial Relations.

## ASSESSMENT PROCEDURES

The assessment procedures for workshop participants were geared to meet the needs of those with a responsibility for developing a whole vocational program. Therefore, we adapted this assignment to assist us in determining the interpersonal skills needed by students with jobs in cosmetology, industrial electricity, and automotive mechanics. (We are presently expanding this procedure to include all of the vocational programs whose students are required to take Customer-Industrial Relations.)

Information was gathered as follows:

1. An open-ended questionnaire was developed for use in interviews (see attached).
2. Two employers in each vocational area were interviewed by course coordinators.
3. Instructors in the various vocational areas were interviewed by the coordinators.
4. Preliminary and incomplete data were used as a basis for development of course competencies.
5. A modified questionnaire was developed for use as a student project. (See attached) Selected students in various vocational areas are in the process of interviewing employers in their particular area. This interview is to be shared with their class as a learning activity. We plan to continue student collection of data. We have found it to be a positive and valuable learning experience for students. In addition, by using this data, competencies can be added and/or modified in particular vocational areas to encourage the development of interpersonal skills looked for by employers. We see this as an on-going project that will reflect the changing needs of a changing job market. We also see it as a publishable research project.

Open-ended questionnaire used by students interviewing employers:

I am working on a project for a course I am taking in Customer-Industrial Relations. We are interested in finding out what skills and abilities and personality traits employers look for when they hire workers. We know, of course, that you want someone who is trained to do a good job in \_\_\_\_\_ (cosmetology, industrial electricity, and automotive mechanics). In other words, we know you look for someone who has the technical skills and abilities that the job requires. What we are interested in is finding out what you want in an employee IN ADDITION TO good technical skills. Are there any particular personal or personality traits that you look for--or any special attitudes or behaviors that you would like for a new employee to have? Would you tell me the ones that you consider most important?

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Any others?

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I have one more question: Are there any personal or personality traits or attitudes or behaviors that you want to be sure that the person you employ DOES NOT HAVE? Would you name them for me?

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Open-ended questionnaire for interviewing employers:

We are developing a course in Customer-Industrial Relations. We are interested in finding out what skills and abilities and personality traits employers look for when they hire workers. We know, of course, that you want someone who is trained to do a good job in \_\_\_\_\_ (cosmetology, industrial electricity, and automotive mechanics). In other words, we know you look for someone who has the technical skills and abilities that the job requires. What we are interested in is finding out what you want in an employee IN ADDITION TO good technical skills. Are there any particular personal or personality traits that you look for--or any special attitudes or behaviors that you would like for a new employee to have? Would you tell us the ones that you consider most important?

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Any others?

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We have one more question: Are there any personal or personality traits, or attitudes or behaviors that you want to be sure that the person you employ DOES NOT HAVE? Would you name them for us ?

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**CUSTOMER-INDUSTRIAL RELATIONS**  
**Entry-Level Competencies**

**Virginia Lees**  
**Margaret Sielski**  
**Department of Behavioral Sciences**  
**Pensacola Junior College**

| REQUIRED<br>ACTION | FOCUS<br>OBJECT                              | CONDITIONS                         | CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------|----------------------------------------------|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recognizes         | His/her basic values and beliefs             | In work settings and personal life | Self-evaluation concerning self-esteem, self-awareness, basic values                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Makes              | Decisions and choices consistent with values | In work setting and personal life  | <p>Self-evaluation:</p> <p>Am I open?</p> <p>Am I honest?</p> <p>Am I consistent?</p> <p>Am I confident?</p> <p>Do I feel good about myself?</p> <p>Are my decisions and choices moving me in the direction of goal fulfillment?</p> <p>Supervisor evaluation:</p> <p>Is he/she open?</p> <p>Is he/she honest?</p> <p>Is he/she consistent?</p> <p>Is he/she confident?</p> <p>Does he/she feel good about self?</p> <p>Are his/her decisions and choices moving him/her in the direction of goal fulfillment?</p> |
| Exhibits           | Positive self-concept                        |                                    | Confidence reflected in posture, facial expression and other body language expresses confidence and "can do" attitude, does not engage in self "put downs."                                                                                                                                                                                                                                                                                                                                                        |

| REQUIRED ACTION        | FOCUS OBJECT                                                | CONDITIONS                                                                               | CRITERIA                                                                                                                                                                                             |
|------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Receives               | Information from customers/clients, co-workers, supervisors | In work settings                                                                         | Uses feedback skills correctly; work assignments completed satisfactorily; customer satisfaction (did customers return?)                                                                             |
| Listens                | To customers/clients, co-workers, supervisors               | In work settings where people are expressing emotion and/or discussing needs or problems | Supportive relationships with customers, co-workers                                                                                                                                                  |
| Communicates Tactfully | With customers/clients and co-workers                       | In work setting                                                                          | Positive evaluation of supervisor; positive responses of clients/customers; avoids confrontation; absence of customer/client complaints (no angry phone calls); return business (build-up clientele) |
| Uses                   | Positive problem-solving skills                             | In work setting and personal life                                                        | Positive relations with co-workers, supervisors, customers/clients.<br><br>Evaluated by supervisor as cooperative and "good team member."                                                            |

| REQUIRED ACTION                    | FOCUS OBJECT                                                      | CONDITIONS                                                                 | CRITERIA                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------|-------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acts Assertively                   | Interpersonal relations and in personal decisions and actions     | Work setting with customers, co-workers, supervisors, and in personal life | <p>Positive evaluation by supervisor; participates effectively in meetings; expresses opinion and feelings freely; absence of aggressive behavior; exhibits confidence in self and others.</p> <p>Self-evaluation: Feels in control of his/her own life.</p>                                                                                      |
| Grows                              | In personal and work life                                         |                                                                            | Promotion, job change, takes courses, new goals, and broadened interests, new friends                                                                                                                                                                                                                                                             |
| Practices honesty and truthfulness | With company, customers/clients, co-workers, money                | In work setting, handling money, financial records; dealing with customers | Money and inventory accounted for; service records accurate and reliable; customer trust as reflected in repeat business; worker has respect of co-worker.                                                                                                                                                                                        |
| Manages                            | His/her time, energy, and major role responsibilities efficiently | On and off the job                                                         | <p>Meets deadlines, completes daily work assignments on time; expresses satisfaction and lack of conflict between work roles and major personal roles; evidence of minimal amount of conflict between on-the-job and off-the-job obligations as evaluated by self and supervisor (i. e. number of personal phone calls on company time, etc.)</p> |

| REQUIRED ACTION    | FOCUS OBJECT                                                      | CONDITIONS                             | CRITERIA                                                                                                                         |
|--------------------|-------------------------------------------------------------------|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Grooms             | Himself/herself                                                   | For work settings during working hours | Appearance reflects accepted norms and complies with company policy.                                                             |
| Conforms           | To company policy                                                 | In daily work, time schedule           | Time cards; records; annual, personal and sick leaves; and supervisor evaluation, reflect conformity to company policy           |
| Recognizes         | Recognition of stress in self and others.                         | In work setting and personal life      | Acknowledges frustration, expresses awareness of "future shock"; demonstrates empathy for co-workers                             |
| Copes              | With stress                                                       |                                        | Physical condition reflects good health habits (diet, exercise); uses relaxation and techniques; enjoys recreational activities. |
| Relates Positively | To members of majority and minority groups without discrimination | In work setting                        | Supervisor evaluation; lack of client/customer complaints; majority and minority customer/client return.                         |

| REQUIRED ACTION        | FOCUS OBJECT                                                                                                                                                                           | CONDITIONS      | CRITERIA                                                                                                                                                                                                                                      |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Supports and Utilizes  | Federal law and policy concerning equality and affirmative action                                                                                                                      | In work setting | Behavior reflects support of federal law (does he/she support hiring of minorities; does he/she have a positive influence with peers concerning support for affirmative action, does he/she accept minority person as equal co-worker)        |
| Possesses and Utilizes | Basic knowledge and current information concerning collective bargaining, labor unions, and other worker organizations                                                                 | In work setting | Decisions about union participation in line with company policy, state laws, vocational area                                                                                                                                                  |
| Applies                | Current knowledge of fringe benefits and programs available for workers (such as social security, health, and life insurance, unemployment insurance, educational program for workers) | In work setting | <p>Is worker applying for and utilizing these benefits and programs?</p> <p>Is worker attending meetings that explain new programs and policies?</p> <p>Has worker asked the Social Security Administration for report of his/her status?</p> |



REQUIRED  
ACTIONFOCUS  
OBJECT

## CONDITIONS

## CRITERIA

Keeps up

With development in relevant  
social, political, and economic  
issuesDoes worker subscribe to  
and/or read appropriate magazines,  
journals, papers?Does he/she take advantage of  
courses, workshops?

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**CUSTOMER-INDUSTRIAL RELATIONS**  
**Course Competencies**

**Virginia Lees**  
**Margaret Sielski**  
**Department of Behavioral Sciences**  
**Pensacola Junior College**

| REQUIRED<br>ACTION | FOCUS<br>OBJECTS                                                                                                        | CONDITIONS                                                            | CRITERIA                                                                                                                                                                                                                                                                                               |
|--------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Participates       | In values clarification exercises                                                                                       | As individual and as member of small group in class learning activity | Present in class. Participation in activities. Makes at least 2 comments in group activity. Makes at least one contribution to wrap up session.                                                                                                                                                        |
| Makes              | Decisions and choices consistent with values                                                                            | In work setting and personal life                                     | One page self-evaluation paper reveals at least two behavior changes in positive direction                                                                                                                                                                                                             |
| Exhibits           | Positive self-concept                                                                                                   | In classroom setting                                                  | Volunteers at least once to demonstrate learned skill. Gives at least one self-validation in class activity. Scores at least four points higher on post-test of Purkey Modification of Combs-Soper Scale for Inferring Self Concept (or makes minimum score of at least 21 points out of possible 25). |
| Receives           | Information accurately from customers/clients, co-workers or supervisors in simulated role play or in written exercises | In classroom learning activity                                        | Demonstrates correct use of feedback skills in four out of five role play responses, or in written exercises                                                                                                                                                                                           |

| REQUIRED ACTION        | FOCUS OBJECT                                                                                                               | CONDITIONS                                                                                                  | CRITERIA                                                                                                                                                                                                     |
|------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Listens                | To customers/clients, co-workers, supervisors in simulated learning exercises as they reveal emotions, needs, and problems | Classroom learning activities based on Thomas Gordon techniques                                             | Active listening skills used correctly in simulation activity with one error permitted.                                                                                                                      |
| Communicates Tactfully | With customers/clients, and co-workers in simulated exercise                                                               | Classroom learning activity                                                                                 | 85% of class and instructor judge communication "tactful"                                                                                                                                                    |
| Uses                   | Thomas Gordon's problem-solving skills                                                                                     | (1) In classroom exercise and<br>(2) In personal life                                                       | (1) Class solves problem to satisfaction of all participants<br>(2) Student reports problem-solving experience in one-page written report                                                                    |
| Acts assertively       | In interpersonal relations and in personal decisions and actions                                                           | (1) In at least 3 simulated role play exercises<br><br>(2) In real life situations both in and out of class | (1) 90% of class and instructor judge behavior as assertive (using Emmons-Alberti criteria)<br>(2) Student scores at least 7 points higher on post-test than pre-test (using Alberti-Emmons 35-point scale). |
| Grows                  | In personal, school, and/or work life                                                                                      |                                                                                                             | Student reports awareness of growth in at least two areas of his/her life in one-page written report.                                                                                                        |

| REQUIRED ACTION                    | FOCUS OBJECTS                                                     | CONDITIONS                                                                                              | CRITERIA                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Practices honesty and truthfulness | In personal and/or work life                                      | None                                                                                                    | <p>(1) Student reveals opinion, belief or judgment that is opposite that of peers or authority-figure.</p> <p>(2) Student grades his/her own class activity sheet accurately (admitting errors)</p> <p>(3) Student reports honest behavior in one paragraph assignment sheet</p>                                                                    |
| Manages                            | His/her time, energy, and major role responsibilities efficiently | In class attendance, promptness, and in fulfilling course objectives. In simulated role play exercises. | Meets class attendance standards. Present in class on time (one tardy permissible). Assignments completed by announced deadline. Gives undivided attention to class activity (does not sleep, or work on assignment for another class). Demonstrates acceptance of role responsibilities in simulated exercise (85% of class and instructor agree). |

| REQUIRED ACTION | FOCUS OBJECT                             | CONDITIONS                                                                     | CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------|------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Grooms          | Himself/Herself                          | For class activities, meeting college standards for safety and appropriateness | Appearance reflects accepted social norms and complies with school policy for particular program (i. e. cosmetology students in white uniform).                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Conforms        | To college policy and class requirements | In daily work, time schedule                                                   | Time cards, records, and assignments conform to course requirements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Recognizes      | Symptoms of stress in self and others    | In classroom setting and personal                                              | Acknowledges frustration and expresses awareness of "future shock" by making at least two contributions to small group activity concerned with becoming aware of "future shock" experiences.<br><br>Avoids statements denying reality of "future shock" and stress.<br><br>Discovers and checks his/her areas of stress on 31-point stress list. (Number checked depends on individual. Less than three checked indicates lack of understanding or denial.)<br><br>Correctly identifies sources of stress by completing Life-Change Index (score depends on individual circumstances). |



| REQUIRED ACTION    | FOCUS OBJECT                                                      | CONDITIONS                     | CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------|-------------------------------------------------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Copes              | With stress and change                                            | In classroom and personal life | Participates in relaxation exercises in classroom.<br>Completes assignment sheet (My Plan for Coping with Stress and Change), indicating specific plans for (1) regular exercise, (2) relaxation, and (3) recreation, and three specific plans he/she has put into effect to slow down change in personal life (using Alvin Toffler's suggestions).<br>Demonstrates coping skills by healthy physical appearance and lack of serious stress symptoms. |
| Relates positively | To members of majority and minority groups without discrimination | In classroom setting           | All students participate freely with peers in class activities. (No student left out or discriminated against in small group activity.)<br><br>Makes at least one statement expressing empathy for minority group member after participating in simulated role play in role of minority worker; or after watching film on discrimination.<br><br>Student contributions free of racist, ethnic, sexist statements, stereotypes, and joking.            |

| REQUIRED ACTION                           | FOCUS OBJECT                                                                                                           | CONDITIONS                                | CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Demonstrates knowledge of and support for | Federal law and policy concerning equality and affirmative action                                                      | Classroom activity and course assignments | Passes written test on (1) current affirmative action policy, and (2) Equal Rights Amendment with minimum score of 85 percent. Identifies areas where inequality exists by making at least one contribution to small group project. Chooses to "hire" a minority worker after watching a videotape of qualified applicants being interviewed for a job. Absence of uninformed, prejudiced comment concerning Affirmative Action, ERA, etc. |
| Possesses and Utilizes                    | Basic knowledge and current information concerning collective bargaining, labor unions, and other worker organizations |                                           | Passes objective test on collective bargaining, current information, and "pros" and "cons" of labor unions, and worker organizations with score of at least 80 percent. Classroom discussion does not reflect local "cliche thinking" and stereotyping concerning collective bargaining.                                                                                                                                                   |

| REQUIRED<br>ACTION | FOCUS<br>OBJECT                                                                                                                                                                        | CONDITIONS                                                                                                | CRITERIA                                                                                                                                                                                                                                                                                                                                         |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Applies            | Current knowledge of fringe benefits and programs available for workers (such as social security, health, and life insurance, unemployment insurance, educational program for workers) | In simulated work setting, in classroom role play, or other simulation exercises. Also in objective test. | In simulated situation, role play, or written assignment the student demonstrates knowledge of programs and benefits by (1) applying for appropriate benefit, (2) identifying program or benefit for which worker is eligible. Student passes objective test with score of 80 percent or higher. Student requests social security status report. |
| Keeps up           | With developments in relevant social, political, and economic issues                                                                                                                   |                                                                                                           | Student subscribes to news magazine or makes regular visits to library. Contributes at least one relative news item to class discussion. Reports regular watching of TV news.                                                                                                                                                                    |

### A Plan for Utilization of the Project

We are utilizing the total workshop experience in the continued course development of Customer-Industrial Relations. The competencies are serving as the basis of the syllabus presently being revised. We are continuing to work with instructors in the various areas to be sure that the course is relevant to the needs of their students.

As a by-product of this workshop, Katie Yates in Cosmetology and Virginia Lees are working together in developing a competency-based instructional package on the 1979 Florida Cosmetology Act.